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Defense planning in the Ministry of Defense of Ukraine: decade of attempts and mistakes

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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**DEFENSE PLANNING IN THE MINISTRY OF DEFENSE
OF UKRAINE: DECADE OF ATTEMPTS AND
MISTAKES**

by

Iryna Bystrova

June 2015

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DECADE OF ATTEMPTS AND MISTAKES**

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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

The intensification of the Euro-Atlantic integration of Ukraine, the conduct of military operations in the South-East region of the state, and the need for immediate defense reforms are among top state priorities for the Ukrainian government. The creation of the modern Ukrainian Army should be a product of a reformed defense planning system. Previous unsuccessful attempts at defense planning need to be acknowledged and not replicated. It is time for the Ukrainian defense institution to rid itself of Communist legacy concepts and adopt Western ones.

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LIST OF ACRONYMS AND ABBREVIATIONS

AFU	Armed Forces of Ukraine
AME	Armament and military equipment
ATO	Anti-terrorism operation
BUR	Bottom-Up Review
CECE	Code of economical classification of expenditures
CMU	Cabinet of Ministers of Ukraine
DIC	Defense-industrial complex
DPGSP	Defense Policy and Global Strategy Paper
DR	Defense review
GAO	Government Accountability Office
GS	General Staff of the Armed Forces of Ukraine
GDP	Gross Domestic Product
IAS	Information-analytical system
IAS “Resource”	Information-Analytical System for support of defense planning “Resource”
MFU	Ministry of Finance of Ukraine
MDDMP	Main Directorate of Defense and Mobilization Planning of the General Staff of the Armed Forces of Ukraine
MDU	Ministry of Defense of Ukraine
MoD	Ministry of Defense
NSDCU	National Security and Defense Council of Ukraine
OMF	Other military formations
QDR	Quadrennial Defense Review
PMD	Plan of Maintenance and Development of the Armed Forces of Ukraine
R&D	Research and development
SDB	Strategic Defense Bulletin of Ukraine till 2015
SDR	Strategic Defense Review
SMO	State military organization
SPSR	Strategic Defense and Security Review

TPMD	Tentative Plan of Maintenance and Development of Armed Forces of Ukraine
VRU	Verkhovna Rada of Ukraine (Parliament)

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I. INTRODUCTION

At the present time, among the most important priorities of foreign and domestic policy of Ukraine are the adoption of Euro-Atlantic integration by the president of Ukraine, Petro Poroshenko, and the related defense sector reform according to European and NATO standards. Maintaining the proper level of defense of the state, law enforcement and combat readiness of the Armed Forces of Ukraine (AFU) is the foundation of national interests and military-economic security. The current war in the Southeast of Ukraine confirms it.

Creating a well-armed and equipped AFU is impossible without effective, well-timed and opportune defense planning. A decade of existing defense planning in the AFU proves the necessity of improving planning and development basic coherence within the current planning and budget execution systems. The current system of defense planning in the Ministry of the Defense of Ukraine (MDU) requires fundamental reform at all levels: long, middle, and short. Currently, the AFU continues to work to improve the legal and regulatory framework for defense planning. Unfortunately, this work is based on Communist legacy concepts which are not linked, and are completely unconnected to the output of defense outcomes.

The AFU plays a primary role in the societal, security, and economic reforms currently pursued by the Ukrainian State. However, the AFU should not be involved in all these reforms. The government should create such conditions for the MDU and the AFU that they are able to fulfill their tasks and be responsible for just the defense and security sphere. Today, there is a need for a more complete disclosure of the nature and values, an in-depth analysis of the activities of the military planning and support for the army, which is especially important in the context of the ongoing Anti-Terrorism Operation (ATO) in Eastern Ukraine. It is also vital to understand the gaps and mistakes in defense planning and force management which led to the lack of combat readiness in the AFU, and to chart the ways to repair and reverse those gaps and mistakes.

In this research study the questions of the theory and practice of military planning are investigated from the perspective of the formation, distribution, and use of defense expenditures during a series of reforms of the AFU over the past twenty-five years. Analyzing the formation of the defense budget and defense planning has practical value, not only for vital activity of the Ukrainian Armed Forces, but also for the national security sector as a whole, including its relationship with the defense industry.

The relevance of the study is explained by the fact that effective and modern, output-driven defense planning has not been embraced at all and earlier attempts at such planning have not been based on the principles of a systematic approach that produces the desired outcome. Another issue is that the system of defense planning is not implemented throughout the entire state's security sector (for example, the Border Guards Service, or the Interior Troops and the National Guard of the Ministry of Internal Affairs), but just in the AFU. This is the result of a lack of reasonable holistic concepts of reforming the AFU. Additional challenges include civil-military relations in the area of defense planning, and the lack of effective continuous feedback on planning and implementation.

In effect, the current system of defense resource management of Ukraine is a contradiction in that the structure and scope of the defense budget do not meet the requirements of the armed forces to undertake combat operations. Thus, there are fundamental conceptual contradictions in the views and principles of providing the AFU. Twenty-three years after independence was the first time Ukrainian armed forces had to defend the nation within its own territory. This incursion allowed the MDU and The GS an opportunity to examine its existing system of defense planning in practice, and analyze its capacity and flexibility.

A. IMPORTANCE AND PURPOSES

The importance of this research is in the need to develop and explore the organizational and economic aspects of the defense planning system for the planned distribution and effective use of defense resources of the state to ensure military and economic security. There is a need to establish an effective system of defense planning and force management in the AFU, supported by a budgetary execution process, which

will allow the efficient use of limited financial resources of the MDU to meet its national defense and security objectives, and to continuously update the planning priorities and their implementation status at the national, Ministry, Force, and unit levels.

In the current situation, it is very important to explore the economic-organizational aspects of development of the defense planning system for the planned distribution and efficient use of state defense resources to ensure military and economic security. Currently, this is the basis for ensuring the defense capacity of Ukraine, and is especially an important element in the creation of a new military doctrine of Ukraine.

The purposes of this research are (1) to outline the outstanding aspects of the general problems of improvement of the existing defense planning system, (2) to define the basic ways to overcome the problems, (3) to describe necessary changes of the existing legislation framework of defense planning, and (4) to revive the information-analytical system for support of defense planning “Resource” (IAS “Resource”).

B. TASKS, OBJECT AND SUBJECT

This work produces a comprehensive analysis of the system of defense planning, and the study is organized to address the following tasks:

1. A study of methodological foundations of the existing system of defense planning and prioritization of its development within the context of economic, security, and legal reforms in Ukraine.
2. Elaboration of the nature of defense planning of the Ukrainian Army, along with justification of the principles of defense planning and amendments to the existing legislative base.
3. Analysis of the mechanism of the defense review (DR) taking foreign into account.
4. Analysis of conducting of the software “Information-Analytical System for Support of Defense Planning ‘Resource’” (IAS “Resource”) and providing a proposal about its further necessity.
5. Development of proposals on the improvement of legislation on defense planning.
6. Suggestion of interdependence of budget and defense planning.

The object of the research is the system of civil-military, command, and economic relations in the process of implementing support of the AFU related to defense planning, assessment of the structures of the MDU and the General Staff of the Armed Forces of

Ukraine (GS), ascertainment of whether they work efficiently, and assessment of the failures of the IAS “Resource” and how to improve the efficiency of its use in order to enhance combat readiness.

The subject of the research consists of the theoretical and methodological basis for the formation and realization of the components of the framework for defense planning for the prospective and during the implementation of the allocated expenditure for the current year.

The theoretical basis of this work is the fundamental foundations of Western best practice in defense management; scientific works of domestic and foreign scholars and practitioners on issues of defense planning, budgeting, and legal issues of support of the AFU; a systematic approach to the study of economic processes and positions in which financial and economic relations are viewed as a system phenomenon.

C. PROBLEM AND METHODOLOGY

The present day defense sphere of Ukraine has a system of laws that has been adopted in different periods of independence. All these laws have not been adopted in a clear hierarchical order, lack coherence and clarity, and are almost exclusively not focused on producing defense outcomes. Rather, they focus on reinforcing the centralization of control of everything. There is no clarity on the previous indicators’ ultimate goal, the choice of priorities to achieve it, the operating parameters of facilities management, and operation of boundaries and liability of implementation.

Another problem is the lack of a statutory control mechanism that determines the object and scope of control and liability of its implementation. A consequence of this situation is the existence of a number of legal provisions, legislative acts (usually declarative) which will never be executed and are unlikely to be reinforced. Involvement of NATO-experts in the development of laws and programs, specifically at the international level, in order to increase the degree of testing instruments, unfortunately did not address these issues. Mostly, this problem is due to attempts at building a defense planning system on an existing legacy conceptual base. Long-term non-intervention in

the situation contributed to the reduction in military security and the further decline of defense planning in general.

The next problem arises from using the existing software IAS “Resource.” It was developed to create a database for all military units and provide analysis and modeling of alternative structures of individual units and armed forces as a whole, including financial indicators. However, the IAS “Resource” does not have specific standards and norms. Its computation basis is premised on previous reports. Moreover, reporting dates of the IAS “Resource” do not agree with planning dates, when this system should provide support.

The problem of integration defense and budget planning in a single system arose as far back as 2007. The situation when “there is no direct connection between defense and budget programs ... creates the problem in assessing the efficiency of using budgetary funds.”¹ Thus, the integration defense and budget planning is still a problem. Moreover, inefficient distribution and the stuffing of defense programs create a non-transparent and erratic budget.

The next problem is personnel reduction that leads to a maldistribution in staff structure specialists in force management in the branches of the AFU, the MDU, and the GS. Thus, key force management functions throughout the armed forces need cardinal changes. Moreover, imprudent policies that have produced reductions and inefficient organization of all branches of the AFU, the MDU, and the GS have produced dysfunctionality throughout the entire defense institution. Finally, attempts to implement Western concepts, assumptions, and institutional logic without retiring their Communist legacy counterparts have resulted in continuing failure of the defense institution to produce envisaged defense outcomes.

The study used the following methods: analysis in the study of the structure and dynamics of the work of units of defense planning of the AFU; historical and systematic in the study of the relationship between defense and budget planning; comparative analysis of the documents in the study of scientific and special literature and a legislative

¹ I.M. Aparshin and M. M. Denegkin, “Views on the Integration of Defense and Budget Planning of the Armed Forces of Ukraine Into a Single System,” *Science and Defense*, no 1 (2007): 24. <http://www.nio.mil.gov.ua/pdf/2007-1.pdf>.

base; and different methods of observation, grouping, classification, and graphical representation of results. Also the personal experience of the author—who has been working in the Main Directorate of Defense and Mobilization Planning of the GS (MDDNP) since its beginning—was used in this research.

D. LITERATURE REVIEW

Since the Ukraine's independence in 1991, the Ukrainian army has been downsizing and has suffered political and financial neglect. The Orange Revolution in 2004 introduced a new phase of reforming the AFU:

The nature of the revolution in Ukraine, which ushered in a democratically elected pro-Western government that actively sought Euro-Atlantic integration, shaped the model of military reform adopted in Ukraine. In 2005 the Ukrainian President [V. Yushchenko] stated that he believed NATO membership to be in Ukraine's national interest. A strategy of military imitation included the adoption of dominant Western values and concepts such as the development of agile, mobile, high tech, flexible, deployable and interoperable professional forces. For V. Yushchenko, this strategy would create a virtuous circle where military reform would not only help facilitate foreign policy goals but would also have the added benefit of developing an effective and efficient fighting force in Ukraine. Military imitation would also allow Ukraine to build a military that reflects and upholds its democratic values.²

In 2004, Ukraine's Euro-Atlantic orientation led to the creation of a force management system needed to support Western-style defense planning. In this direction, some steps were taken in that the system (1) created a legislation framework to support defense planning and force management; (2) improved transparency; and (3) improved the institutional mechanism for implementation, especially in terms of the differentiation between planning and execution of the MDU and the GS. However, the system was built on Eastern standards and this made the attempt to shift to Western standards almost impossible. Table 1 shows Western norms in comparison with Communist legacy ones. It is clear that using Western norms without completely replacing Eastern ones does not create progress.

² Debora Sanders, "Ukraine Military Reform: Building a Paradigm Army," *The Journal of Slavic Military Studies*, 21, no. 4 (December, 2008): 601, DOI: 10.1080/13518040802497341.

Table 1. Western vs Eastern Norms³

Western norms	Eastern norms
Practice focused, Theory checks and underpins	Party Doctrine focused (disguised as theory); Practice becomes irrelevant
De-centralized execution	Centralized execution
Results oriented	Process oriented
Future oriented	Past oriented
Low context	High context
Serve the troops	Ignore troop's welfare
Take chances	Uncertainty avoidance
Initiative rewarded	Initiative is condemned
Lying is not an option	Lying is not a sin
Failure is part of learning	Failure is not an option
The work is a profession	The work is for personal reward

In order to understand the failure of defense planning, it is necessary to agree on a definition: What is “planning”? Mintzberg⁴ gives several definitions: (1) “future thinking;”⁵ (2) “controlling the future;”⁶ (3) “decision making;”⁷ (4) integrated decision making;”⁸ and (5) “a formalized procedure to produce an articulated result, in the form of an integrated system of decisions.”⁹ In addition, he suggests why organizations have to

³ Thomas-Durell Young, *The Persistence of Pernicious Legacies: Why Defense Reform Has Failed in Central and Eastern Europe*, (Naval Postgraduate School, Monterey, CA, not dated 2012).

⁴ Henry Mintzberg, *The Rise and Fall of Strategic Planning: Reconceiving Roles for Planning, Plans, Planners*. (New York: Toronto: Free Press, 1994). <https://libsearch.nps.edu/vufind/Record/231356>.

⁵ Ibid., 7.

⁶ Ibid.

⁷ Ibid., 9.

⁸ Ibid., 11.

⁹ Ibid., 13.

plan: (1) “to coordinate their activities;”¹⁰ (2) “to ensure that the future is taken into account...in three basic ways: 1. preparing for the inevitable 2. preempting the undesirable 3. Controlling the controllable;”¹¹ (3) “to be ‘rational’”;¹² (4) “to control.”¹³

However, in any case, planning is closely coupled with resources, namely money. In addition, defense planning completely depends on a state’s economy. Hitch and McKean¹⁴ explain “a way of looking at military problem ... as ... [an] economic problem in the efficient allocation and use of resources.”¹⁵ This book became a classical work even in the Soviet Union; nevertheless, it was and still is difficult to understand because of the misunderstanding between Western norms and the lack of thinking “out-of-the-box” in Communist legacy defense institutions. Unfortunately, all post-Soviet countries had and still have difficulty understanding Western norms, mostly because of the heritage of the old education system that has yet to be reformed.

Strategic misunderstanding is a problem not just in Ukraine. Mintzberg principally associates strategy with a plan. It is interesting to notice how Grattan defines and pictures the strategy: “Fundamentally, strategy is a series of measures adopted to achieve a stated aim.”¹⁶ He cites Carroll—the conversation between Alice and the Cheshire Cat—to show an understanding of strategy:

“‘Would you tell me, please, which way I ought to go from here?’

‘That depends a good deal on where you want to get to,’ said the Cat.

‘I don’t much care where —,’ said Alice.

‘Then it doesn’t matter which way you go,’ said the Cat.”

¹⁰ Ibid., 16.

¹¹ Ibid., 17.

¹² Ibid., 18.

¹³ Ibid., 19.

¹⁴ Charles Johnston Hitch and Roland N. McKean. *The Economics of Defense in the Nuclear Age*. (New York: Atheneum, 1975). <https://libsearch.nps.edu/vufind/Record/314842/Description#tabnav>.

¹⁵ Ibid., v.

¹⁶ Robert F. Grattan, *Strategic Review: The Process of Strategy Formulation in Complex Organizations* (Burlington: Ashgate Publishing Company, 2011), 13.

Carroll's example is a perfectly obvious case of necessity of clear strategic formulation. Unfortunately, all Ukrainian defense guides examined in this research advance only slogans, not any real strategies.

The next issue describes conducting a DR in Ukraine. This research examines Ukrainian sources of organization and conducting such reviews, the use of independent non-military experts' evaluations. In addition, there were observed practice of the UK and the USA through their DR using the research of Cornish,¹⁷ DiRita, Spring and Luddy,¹⁸ Dorman,¹⁹ Larson, Orletsky and Leuschner,²⁰ Punyani,²¹ and Taylor and Boggs.²² On the basis of these observations, a proposal for the necessary change in Ukrainian legislation was formulated.

Another problematic issue is the IAS "Resource." Unfortunately, there are only a few sources about this system. Shelest, who oversaw the creation of this system, has argued why this system needed to be created and describes key points of its structure and conduction.²³

Finally, the informational base of this research is supported by an examination of the legal basis for the implementation of the components of the AFU: the Constitution of

¹⁷ Paul Cornish and Andrew M. Dorman, "Fifty Shades of Purple? A Risk-Sharing Approach to the 2015 Strategic Defence and Security Review," *International Affairs*, May 2013.

¹⁸ Larence T. DiRita, Spring Baker, and John Luddy, "Thumbs Down to the Bottom-Up Review," *The Heritage Foundation*, September, 24, 1993, <http://www.heritage.org/research/reports/1993/09/bg957nbsp-thumbs-down-to-the-bottom-up-review>.

¹⁹ Dorman Andrew, "Crises and Reviews in British Defence Policy," *Britain and Defence 1945–2000*; a Policy Reevaluation, 2001.

²⁰ Eric V. Larson, David T Orletsky and Kristin Leuschner. *Defense Planning in a Decade of Change: Lessons from the Base Force, Bottom-Up Review, and Quadrennial Defense Review*. (Santa Monica, CA, RAND, 2001) http://www.rand.org/content/dam/rand/pubs/monograph_reports/2007/MR1387.pdf.

²¹ Punyani Sameer, "The Economics of National Defence in an Age of Austerity," *Chatham House*, October, 17, 2011, <http://www.chathamhouse.org/sites/files/chathamhouse/public/Research/International%20Security/171011report.pdf>.

²² Jennifer M. Taylor, Boggs Emily, *Strategic Defense Reviews: Procedures, Frameworks, and Tools to Enhance Future Defense Institution Building Project* (ISBN 978–0-89206-670-4) (Washington, DC: Center for Strategic and International Studies, September 2011), http://csis.org/files/publication/110930_Taylor_StratDefRev_WEB.pdf.

²³ Y. Shelest, " 'Resource' – the Information-Analytical System for Support to the Defense Planning," *Science and Defense*, no 3 (2005), <http://www.nio.mil.gov.ua/pdf/2005-3.pdf>.

Ukraine, defense and finance laws of Ukraine, decrees of the president of Ukraine, resolutions of the Verkhovna Rada of Ukraine (VRU), decrees of the Cabinet of Ministers of Ukraine (CMU), regulations of the Ministry of Finance of Ukraine (MFU), the MDU, and other ministries and agencies, and materials of research institutions that are engaged in the development of the Ukrainian Army. In addition, data and sources obtained from seminars, meetings, roundtables and scientific-practical conferences on defense planning, as well as operational and current information, which is distributed through an electronic communication network of news agencies and Internet resources, have been cited.

Besides legislation, in Ukraine during the last decade, several analyses of defense problems have been addressed by Ukrainian defense experts, such as Shelest,²⁴ Ostapiec,²⁵ Aparshin,²⁶ Denegkin,²⁷ and others. However, the first of all these studies were aimed at improving the quality of planning by improving the calculation of the budgetary requirements. As shown by long experience, the realities of the state budget have never provided the needs of the armed forces of Ukraine (Figures 5 and 10). Thus, the issue of the defense planning efficiency is still open, but the MDU and the GS need to make strong links between defense planning, prioritization and money.

E. ORGANIZATION OF THE STUDY

The thesis is structured as a qualitative study. The research provides a comprehensive analysis of the activities of the defense planning of the AFU that allows the reader to obtain theoretical and practical results that characterize the novelty of the research, particularly

²⁴ Y. Shelest, V. Shevchenko, R. Fedorenko, A. Nevolnichenko, I. Bodryk, "The Main Tasks of Rational Allocation of Defense Resources into Defense Planning Frame According to the Principles of the Target-Program Approaching," *Collection of scientific works*, Vol 2 (22) (Kyiv, 2004).

²⁵ M. Pavlenko, O. Ostapiec, Y. Kuzmenko, "The Formation of Budget of the Ministry of Defense of Ukraine in the Short-Term Defense Planning," *Science and Defense*, no 1 (2006).

²⁶ Aparshin I.M., Denegkin M.M., "Views on the Integration of Defense and Budget Planning of the Armed Forces of Ukraine Into a Single System," *Science and Defense*, no 1 (2007)
<http://www.nio.mil.gov.ua/pdf/2007-1.pdf>.

²⁷ O. Grinenko, M. Denegkin, "View on Function of Defense Planning System in the Armed Forces of Ukraine," *Science and Defense*, no 1 (2005).

to define the essence of the measures of defense planning and the conduct of the DR;

to substantiate the relationship between defense and budget planning;

to assess the effectiveness of the IAS “Resource”;

to specify directions of development and improvement of the procedures of the DR and defense planning;

to introduce further changes of Ukrainian defense planning, in particular with a view to its simplification and avoidance of duplication.

Besides the introduction and conclusion, the work consists of five chapters. Chapter II represents the challenge of defense planning in the MDU. Chapter III describes the conducting of the DR in Ukraine and an analysis word practice of it. Chapter IV provides the analysis of the financial resources of MDU, including planning problems of the special fund. Chapter V describes the attempt of the GS to create and conduct IAS “Resource” and raises some critical issues about its future existence. Chapter VI provides a recommendation for increasing the efficiency of defense planning in the MDU and the GS.

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II. CHALLENGE OF DEFENSE PLANNING IN THE MINISTRY OF DEFENSE OF UKRAINE

Ukraine, like any other state, has a specific set of defense tasks, which require material resources and ideological and political efforts. According to Article 17 of the *Constitution of Ukraine*²⁸ “[d]efense of the sovereignty and territorial integrity of Ukraine, ensure[s] its economic and informational security are the most important functions of the state... Defense of Ukraine, the protection of the sovereignty, territorial integrity and inviolability rely on the Armed Forces of Ukraine.”

The goal of defense planning is to produce priorities that will meet the requirements of the defense of the state. Unfortunately, this does not work even during peacetime. The current situation shows that the Ukrainian defense planning system is absolutely useless when it is necessary to make quick decisions in complicated conditions. The experience of conducting ATO confirms its weakness. One of the main tasks of the MDU is the rational allocation and efficient use of scarce state resources for needs of the AFU, especially in today’s Ukraine, that is, producing priorities. Although these tasks are clearly defined in the legislation which governs the activities of the MDU in defense and budget planning, unfortunately, they were built on old Communist legacy concepts and therefore are predictably a failure.

In 2004 with the adoption of the law of Ukraine *About the Organization of Defense Planning*,²⁹ defense planning actually began. However, the newly established defense planning system was not adapted to the existing system of budget planning.

Defense planning is the part of the strategic planning and management of state resources in the defense sphere, carried out in the statutory period to ensure the necessary level of defense capability of the logic prospects of the AFU, given the nature of real and potential threats to national interests and national security in the military sector and economic capabilities of

²⁸ Verkhovna Rada of Ukraine, the Law of June 28, 1996, № 254k/96-BP, *Constitution of Ukraine*, <http://zakon4.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80>.

²⁹ Verkhovna Rada of Ukraine, the Law of November 18, 2004, № 2198-IV, *About the Organization of Defense Planning*. <http://zakon4.rada.gov.ua/laws/show/2198-15>.

the state, with specific measures, performers and timing of their implementation.³⁰

According to the law *About the Organization of Defense Planning*,³¹ the structure of defense planning consist of long- (twelve years), middle- (six years) and short-term (two years) planning with the development of appropriate guidelines documents. The end result of defense planning in the AFU should be the rational management decisions in the form of forecasts, programs, and plans for implementation of the state policy in the field of national security and defense. It should consider the maximum extent of the military-political situation in the region and the world geopolitical situation of Ukraine and its economic opportunities, which contribute to implement comprehensive coordinated actions for the development of the AFU, providing the necessary level of defense capability.

The major problems in defense policy concerning defense planning are (1) Soviet Union strategic framework; (2) unsystematic mosaic nature of work of the public authorities in the development and improvement of the legal framework of the military security sector—in particular the process of military development; (3) inconsistency of legislative and executive branches of government in the context of a comprehensive sustainable development of the AFU; (4) structural and functional incompleteness of the MDU, the GS, and the AFU. Solving these problems will create preconditions for quality improvement of the defense of the state, will promote a positive image of Ukraine to the world, and accelerate the process of European integration.

In addition, the *Military Doctrine of Ukraine*³² is a completely eastern or Soviet approach to defense policy and has failed dismally. This is the main strategic obstacle to the shift from the Eastern to Western pattern. The Military Doctrine was built from the upper level and does not involve or relate to the bottom levels. Any other documents, plans, and programs of long-, middle-, and short-term planning based on the Military

³⁰Ibid., article 1, abstract 6.

³¹ Verkhovna Rada of Ukraine, the Law of November 18, 2004, № 2198-IV, *About the Organization of Defense Planning*. <http://zakon4.rada.gov.ua/laws/show/2198-15>.

³² President of Ukraine, Decree of June 15, 2004, № 648/2004, *About Military Doctrine of Ukraine* <http://zakon4.rada.gov.ua/laws/show/648/2004>.

Doctrine are not successful either. Besides, the government is going to change policy, it still keep this Soviet strategy in mind and could not get rid of it, not just as a document, but as a way of thinking as well. The government is going to change policy; however, it still keeps this Soviet strategy in mind and could not get rid of it—not just as a document, but as a way of thinking as well.

This chapter provides a discussion about the development of strategic planning, failure of the state defense programs, advance of short-term planning, and the establishment of planning structures in the MDU and the GS.

A. DEVELOPMENT OF STRATEGIC PLANNING

Reforms in any field involve clarification of the contents of its procedure and the determination of its conceptual apparatus. This is especially important if such changes occur at the state level and directly affect the national security of the country. The uncertainty in this area can lead to serious complications in planning and implementation. For instance, the initial phase of the transformation of the U.S. Armed Forces in 1996–2001 shows that the absence of a single definition of the term “transformation” between senior military and civilian leadership of the state led to a serious controversy about the purpose, timing and implementation of the process. Even at the departmental level (Department of Defense), these reforms had no consistency on this issue. This could bring transformation to the interagency rhetoric or limited and diminished measures that the country cannot afford at that moment. Therefore, as the outcome of the reform on all aspects of American forces (conceptual apparatus, the distribution of authority, order and timing of events, etc.), Defense Minister D. Rumsfeld approved the *Guidelines for planning reform of the Ministry of Defense*, which structure was included in the “Guidelines on defense planning.”³³

The logical question is how to plan and implement a complex event when a single conceptual vision of its essence has not been made? Uncertainty of conceptual apparatus of the Ukrainian military reform has led to unfavorable consequences. In particular,

³³ A. Medin, “To the Question About Transformation of Armed Forces of the USA,” *Foreign Military Review*, no 7 (2005): 2.

during the 1990s, Ukrainian political and public figures apprehended this process in different ways, sometimes with opposing positions. For example, some considered the main task as “reduction of personnel and armaments,”³⁴ others considered it to be “structural changes and modernization,”³⁵ and some even identified it as a “serious threat to the military security of Ukraine.”³⁶ Such conflicts led to a critical perception of military conversion processes among the people of Ukraine. However, the conceptual framework of military-reformation areas still are not defined in the legislation. According to Belov,³⁷ “Ukrainian example of specific features of post-Soviet Union states ... One of the consequences became ... lack of consistency, some declarative and amorphousness of Ukrainian legislation on national security and defense.”

The *Military Doctrine of Ukraine*³⁸ is the main document of strategy level. This document contains just general political guidelines (non-block country), but does not clarify clear tasks for the AFU, just general statements. Thus, Military Doctrine, as a strategic document of Soviet legacy, is actually a list of slogans which failed at the beginning of its existence. Unfortunately, the authorities (and not just the military) are still thinking that the Military Doctrine contains all the answers for every defense questions, which it does not..

More confusion arises from the fact that the Military Doctrine is not useful and effective for defense policy, and other legal documents of strategic level based on the Military Doctrine were and are going to fail. *The National Security Strategy of Ukraine*³⁹ developed and approved it on the basis of national security policy framework. This

³⁴ G.K. Kruchkov, “The Issues of Legislative Support of Formation and Implementation of Defense Policy of Ukraine,” *Defense Policy of Ukraine: Realities and Prospects*, National Institute of International Security Problems. (Kyiv, 2004), 30.

³⁵ Ibid., 30.

³⁶ Ibid., 30.

³⁷ O. Belov, “Defense Review and Legislative Support of Reformation of Armed Forces of Ukraine,” *Defense Policy of Ukraine: Realities and Prospects*, National Institute of International Security Problems. (Kyiv, 2004), 57.

³⁸ President of Ukraine, Decree of June 15, 2004, № 648/2004, *About Military Doctrine of Ukraine* <http://zakon4.rada.gov.ua/laws/show/648/2004>.

³⁹ Verkhovna Rada of Ukraine, Decree of January 16, 1997, № 3/97-BP, *About the Concept of National Security of Ukraine*, <http://zakon4.rada.gov.ua/laws/show/3/97-%D0%B2%D1%80>.

Strategy is the basis for the development of concepts, strategies, and development programs of the state military organization (SMO) and its components.⁴⁰ In 2005, neither *the National Security Strategy of Ukraine* nor other documents defined the strategic directions of military security and military building (including the process of reforming the AFU). Although, one *Military Doctrine of Ukraine*⁴¹ is of the sections of the modern its military-strategic component, it could not claim to be an entire integrated document of strategy according to its parameters. However, one *Military Doctrine of Ukraine*⁴² is part of the modern military-strategic component; it could not claim to be an entire integrated document of strategy according to its parameters. This is actually an example of conceptual dissonance that destroys defense planning.

Even now, after one year of ATO in the Southeast part of Ukraine, the new government assigned a task⁴³ to develop a new set of long-term planning documents. This task, identified by the NSDCU in due time (three months), almost failed again. Conducting a detailed review of the provisions of key defense planning documents subject to the changes of military-political situation had failed. Nothing changed on the defense planning legislation. At present, most of the leaders of Ukraine are not able to carry out program tasks, because on one hand is the tasks are not timely, and on the other there is no money to do them.

In Ukraine, a complex system of state administration and interagency coordination governs security issues (coordinating the structure of the administration of the president, Apparatus of the NSDCU and the Secretariat of the CMU with duplication). This promotes not joint efforts, but fragmentation and disorientation of the executive system, which leads to low quality planning and management and slows down

⁴⁰ Verkhovna Rada of Ukraine, the Law of November 18, 2004, № 2198-IV, *About the Organization of Defense Planning*. <http://zakon4.rada.gov.ua/laws/show/2198-15>.

⁴¹ President of Ukraine, Decree of June 15, 2004, № 648/2004, *About Military Doctrine of Ukraine* <http://zakon4.rada.gov.ua/laws/show/648/2004>.

⁴² President of Ukraine, Decree of June 15, 2004, № 648/2004, *About Military Doctrine of Ukraine* <http://zakon4.rada.gov.ua/laws/show/648/2004>.

⁴³ President of Ukraine, Decree of May 13, 2014, № 468/2014, *About Decision of the National Security and Defense Council of Ukraine on April 28, 2014 "About Measures to Improve the Efficiency of Planning in the Sector of Security and Defense."* <http://zakon4.rada.gov.ua/laws/show/468/2014>.

the response to the situation. The MFU has undue influence on the final formation of the state programs and plans. Activity of the MFU directs on compliance with the established structure of budget expenditures that do not depend on actual needs, even if these needs have substantial reports.

The president of Ukraine has key functions of management in the sphere of national security and defense.⁴⁴ However, attempts to reconcile the provisions of the Constitution, and the need for political expediency and effective management of the defense area to distribute the zone of influence of the president and the Prime Minister up to that time have not had the desired results. Competition for these zones of influence continues the process of reducing the role and effectiveness of the NSDCU in coordinating and monitoring the activities of bodies of executive power on issues of national security and defense. The apparatus of the NSDCU has a lot of tasks for the preparation of a huge volume of documents; however, little attention is paid to the analysis and forecasts of escalating threats. Absence of distribution of authority and crossing it both vertically (subordinated security structures) and horizontally (interaction between departments of the NSDCU, the President's Secretariat, the Secretariat of the CMU, and between relevant ministries and agencies) significantly complicates the functioning of the security sector.

The current Strategic Defense Bulletin (SDB) "is [a] chronological documentation on the reform and development of the AFU and OMF of Ukraine."⁴⁵ It defines long-term objectives, the ultimate goal of development and prospective frame of the SMO, the main tasks of strategic, operational and tactical levels, and general operational capabilities of the forces. The SDB developed on the basis of the DR.⁴⁶ Critically, it does not address how to achieve these objectives in light of the current security and financial situation facing Ukraine. Besides SDB tasks of strategic, operational and tactical levels, this document does not provide a clear understanding for the Commander of the services of

⁴⁴ Verkhovna Rada of Ukraine. Law of June 28, 1996, № 254k/96-BP, *Constitution of Ukraine*, article 106, subparagraph 17. <http://zakon4.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80>.

⁴⁵ Verkhovna Rada of Ukraine, the Law of November 18, 2004, № 2198-IV, article 9, *About the Organization of Defense Planning*. <http://zakon4.rada.gov.ua/laws/show/2198-15>.

⁴⁶ Ibid., art. 9.

the AFU of what capabilities they should have or obtain and how military units should be trained. As was mentioned in the Military Doctrine, the SDB has obvious slogans as well, but they are based on the first DR, the failure of which is discussed in the next chapter. Adjustment of the SDB with new authority could be on the basis of a special DR for definitions of new and refinement of pre-defined separate areas of development of the AFU and other military formation⁴⁷ (OMF), taking into account changes in the military-strategic situation and the actual funding of the defense. Additionally, the SDB should contain more specific information and tasks about projects, plans, and the responsible person (namely the position or institution and not virtual). The definition of responsibility is very important and makes someone personally responsible for the implementation or failure of certain projects. Therefore, the SDB should have an additional responsibility for the implementation of measures (not for the using of funds) and time of its implementation.

There is a sample of a recent strategic document that was created on the government level. In September 2014, the president of Ukraine introduced the program “Reform Strategy—2020.”⁴⁸ This program clearly and simply indicates the main ways of development and the achievement of key indicators for the state. This is the main five-year document to be implemented, and the president, his administration, and the CMU are responsible for that. However, this is a failure because it does not rely on the current situation, and demonstrates the desire but not the ability to achieve it. Besides, this program concerns defense issues as well: the MDU and the GS were not at all involved. Even the NSDCU was scarcely consulted. This example shows an absence of strategy building from the bottom up.

⁴⁷ Verkhovna Rada of Ukraine. Law of December 6, 1991, no. 1932-XII, *About the Defense of Ukraine*. <http://zakon4.rada.gov.ua/laws/show/1932-12/page1>, art. 12.: Other military formations include the State Border Guard Service of Ukraine, the Security Service of Ukraine, the Ministry of Internal Affairs of Ukraine, Forces of Civilian Defense of Ukraine.

⁴⁸ “Petro Poroshenko presented ‘Strategy of reforms 2020’: The purpose of reforms is membership in the EU,” on September 25, 2014, *Press Service of President*. <http://www.president.gov.ua/en/news/31289.html>.

B. MIDDLE-TERM DEFENSE PLANNING

The program's documents of middle-term planning was and is created based upon to the Military Doctrine as well. The current set of middle-term defense planning programs is difficult to understand and assess because the information and indicators are non-transparent and non-interconnected. Based on the last DR, the first middle-term program—*State Program of Development of the Armed Forces of Ukraine for 2006–2011*⁴⁹—has never been clarified. The successive program—*The State Complex Program of Reformation and Development of the Armed Forces of Ukraine Until 2017*⁵⁰—was approved just in 2013, but in May 2014 this program had been suspended.⁵¹ The last one is restricted information, but even unrestricted information is not transparent and repetitive with other target defense program (the creation aircraft AN-70,⁵² building the warship,⁵³ and creation of the rocket system⁵⁴) or non-interconnection (development of armament and military equipment [AME]⁵⁵). Moreover, middle-term programs are approved by the president or the CMU. This makes the program almost impossible to amend, mostly because of complex procedures and the necessity to make an agreement with different states' agencies. The result of fulfilment of middle-term programs are usually dissatisfying. Thus, such plans need to be revised and adjusted or completely canceled to avoid too many planning documents which in turn need to be adjusted with each other, as separate programs. These programs should not rely on the government for

⁴⁹ President of Ukraine, Decree of December 27, 2005, № 1862–25/2005 (restricted access) *About Decision of the National Security and Defense Council of Ukraine on December 9, 2005 “About the State Program of Development the Armed Forces of Ukraine for 2006–2011.”*

⁵⁰ President of Ukraine, Decree of September 2, 2013, № 479/2013, *About Decision of the National Security and Defense Council of Ukraine on September 2, 2013 “About The State Complex Program of Reformation and Development of the Armed Forces of Ukraine Until 2017.”* <http://zakon4.rada.gov.ua/laws/show/479/2013>.

⁵¹ President Of Ukraine, Decree of May 13, 2014, № 468/2014, *About Decision of the National Security and Defense Council of Ukraine on April 28, 2014 “About Measures to Improve the Efficiency of Planning in the Sector of Security and Defense.”* <http://zakon4.rada.gov.ua/laws/show/468/2014>.

⁵² Verkhovna Rada of Ukraine, Law of February 5, 2004, № 1462-IV, *About the National Program for the Creation of Military-Transport Aircraft An-70 and its Purchases Under the State Defense Order.* <http://zakon4.rada.gov.ua/laws/show/1462-15>.

⁵³ Restricted access.

⁵⁴ Restricted access.

⁵⁵ Restricted access.

their approval. Just the MDU and the GS should define managers or persons responsible for allocating financial resources for defense programs, reporting on their performance, making decisions on the development of the defense industrial complex (DIC), transferring of military camps, and relocating or rearranging of structures.

However, it may be reasonable to consider that instead of middle-term plans and programs, the Strategy of development of the AFU should be developed as a road map of the operational capabilities of the forces. It has to be prepared for the planned year and the next four years (some parameters can be determined for the following years) as a guidance for short-term planning. The strategy is expected to be developed on the basis of approval by government-forecasted financial performance. It will define the tasks of the strategic, operational, and tactical levels, and capacity and capabilities of the AFU. Thus, it will replace the state programs and other middle-term planning documents, which are actually some kind of strategy. But unlike the State Program, it has to be fully detailed in the appendices by every manager—in which direction they have to take their planning. and it should be as transparent as possible for the public. In addition, it is significant to involve the services of the AFU to develop the strategy of development the AFU, define capabilities of military units, and bond available resources with priorities.

C. ADVANCE OF SHORT-TERM PLANNING

The transition to the principles of the program-target method of the planning of armed forces development was established during the implementation of the defense planning system in the MDU and the GS. The main advantages of this method are that organizational and resource support for the implementation of targeted programs should fully meet the requirements of a market economy and determine not only the needs of the state, but also its economic opportunities. The program-target method of planning is some kind of eastern version of Planning, Programming, Budgeting, and Execution System.⁵⁶ The program-target method has been provided since 2002 in the state budget planning,

⁵⁶ Hitch Carlies H. *Decision-Making for Defense*. (University of California Press, Berkeley and Los Angeles, 1967).

but due to the Soviet Union basis system, it is not as efficient in Ukraine as it is in the MDU level, as the state as a whole.

On January 1, 2005, the first cycle of short-term defense planning was launched. *The Plan of Maintenance and Development of Armed Forces of Ukraine for 2006–2007*⁵⁷ was developed the first time. Subsequently, each cycle of the Plan of Maintenance and Development of the Armed Forces of Ukraine (PMD) has improved based on the experience gained from the formation of the budget request of the MDU with regard to mechanisms of short-term defense planning. The main problems that appeared during that work are as follows:

- (1) Annual expected indicators of defense expenditures, defined by the CMU⁵⁸ for 2006–2011, are significantly lower than those provided for the SBD⁵⁹ and *the State Program of Development of the Armed Forces of Ukraine for 2006–2011*⁶⁰ (Appendix A). Thus, the MDU could not provide efficient planning because neither the AFU strategic needs nor middle-term (approved by law) are satisfied. In this case it is impossible to do planning with the full knowledge that real needs never meet the necessary expenditure.
- (2) There is no mechanism for separation indicators of expenditure for needs of the AFU into total defense expenditure. The defense budget of 3% of gross domestic products (GDP) was approved in the asset 2 of the law *About the Defense of Ukraine*.⁶¹ However, the defense budget does not completely belong to the AFU, but the OMF as well. Only about 2.75% does. Exactly 2% of GDP was dedicated to needs of the MDU in the Decree of the president of

⁵⁷ Annual Plan of Maintenance and Development of Armed Forces of Ukraine is created according to the Order of Minister of Defense of Ukraine on January 19, 2010, 15. *On Approval of the Regulations on the Organization and Implementation of Middle-Term and Short-Term Defense Planning in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine*.

⁵⁸ Source: Decrees can be found at <http://zakon2.rada.gov.ua/laws>.

⁵⁹ President of Ukraine, Decree of June 22, 2004, № 670/2004, *About Decision of the National Security and Defense Council of Ukraine on June 17, 2004 “About Strategic Defense Bulletin Until 2015”* <http://zakon4.rada.gov.ua/laws/show/670/2004>.

⁶⁰ Annual Plan of Maintenance and Development of Armed Forces of Ukraine is created according to the Order of Minister of Defense of Ukraine on January 19, 2010, 15. *On Approval of the Regulations on the Organization and Implementation of Middle-Term and Short-Term Defense Planning in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine*.

⁶¹ Verchovna Rada of Ukraine. Law of December 6, 1991, no. 1932-XII, *About the Defense of Ukraine*. <http://zakon4.rada.gov.ua/laws/show/1932-12/page1>.

Ukraine,⁶² which adopted “The State Program of Development of Armed Forces of Ukraine 2006–2011.” Besides, as Figures 5 and 10 show, since 1993 it has never happened.

- (3) Boundary defense expenditures for the MDU for the planned year defined at the beginning of the budget process of the MFU do not exceed the level of previous years, do not take into account rising prices and inflation, and do not meet even the minimum requirements of the AFU.
- (4) Uncertainty of limit expenditures for the needs of the AFU for the planned year means the GS must redo the project of PMD several times (first, according to the needs proposed by commanders of species of the AFU and command of forces that are not part of species, then with subject to the limitations and proposals of resource managers of budget programs (subprograms)⁶³).
- (5) Late defined at the state level macroeconomic indicators in the middle-term planning makes the initial stages of planning—determination of total financial resources—harder.
- (6) The most significant problem is that the Services Commanders have never been involved directly in either the defense or budget planning processes. The Services just allocate what they have from above and proceed according to the direction from the GS. The full centralization from the Soviet Union period still exists and initiative is usually punished.

At the present time, all previously listed items exist, except item (4). In 2010, the new Order of Minister of Defense⁶⁴ made changes in procedure of short-term defense planning. Thus, in 2010 the annual Tentative Plan of Maintenance and Development of the Armed Forces of Ukraine (TPMD) was launched. It includes expenditures to the needs of the AFU for the planned year according to documents of middle-term planning. The PMD is created for three years—a refined date for the planned year and boundary measures and defense expenditures for the next two years. However, in 2010, a new problem concerning item (5) arose. Thus, in 2006–2010 *the State Program of Development of the Armed Forces of Ukraine for 2006–2011* defined financial indicators for the AFU. However, during 2011–2013 the PMD was created almost blindly, with

⁶² President of Ukraine. Decree of December 27, 2005, no. 1862–25/2005. *About Decision of the National Security and Defense Council of Ukraine from 9th of December 2005 “About the State Program of Development of Armed Forces of Ukraine 2006 – 2011.”*

⁶³ Resource managers are defined by the Orders of Minister of Defense of Ukraine and the Head of the General Staff of Armed Forces of Ukraine.

⁶⁴ Minister of Defense of Ukraine, Order on January 19, 2010, 15. *On Approval of the Regulations on the Organization and Implementation of Middle-Term and Short-Term Defense Planning in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine.*

only a grand total of defense expenditures that were defined by the CMU and did not address real needs. The MDU had never had support from the government until the recent events in 2014–2015. The financial problem of defense planning is not that plans could not meet the appropriation, but that the MFU had never carried out the laws that were approved by the government.

Today, the short-term planning process in the AFU performs cyclically. The cycle covers two years, but started a year before the adoption of the State Budget of Ukraine, according to which will be implemented taken (refined) decisions about long- and middle-term programs and the PMD. The short-term planning process ties to the budget process in Ukraine. The relatively short-term planning cycle can be divided into four stages⁶⁵:

1st stage (November–March): determination of preliminary indicators of the State Budget of Ukraine for the MDU project for the next year, the forecast expenditure for the following years, and changes to the list of budget programs.

2nd stage (April–July): development of the TPMD, formation and submission of the budget request of the MDU to the the MFU.

3rd stage (August–November): support of the Law of Ukraine “About the State Budget of Ukraine” project for the next year and designing of the PMD project for the next year.

4th stage (December–February): approval of the consolidated trial budget of the MDU and the PMD for the budget year.

Thereby, today implementation of the PMD enables the GS to plan measures of development and reformation, detailing prospective directions of middle-term defense programs. The previous programs of building, reformation, and development of the AFU were mostly internal in nature. The state programs aimed at solving current problems of

⁶⁵ In details this cycle is described in Section A of Chapter II of the Master Theses, by Kosyanchuk V, “*Cobb-Douglas Production Function as an Approach for Better Resource Allocation in the Ukrainian Armed Forces*” (master’s thesis, Naval Postgraduate School, 2013). <http://hdl.handle.net/10945/34691>.

the MDU and the AFU, but they were not consistent on the objectives, tasks, and deadlines, and were not provided with appropriate resources.

The overall level of defense spending, in theory, should correspond to the economic and financial policy of the state and the international situation. However, this level does not take into account the condition and capability of the troops and the necessary substantiation requirements for the AFU. The allocated amount of the budget is distributed between the structural units of the MDU and the GS and services of the AFU. This method of development budget is ineffective, because it created a gap between the planning of development of the AFU (defense planning) and budgeting. Both of these critical functions are performed by two different bodies of military and public administration: defense planning is by the GS, and development budget is by the MFU according to the request of the MDU.

Until recently, planning for one to two years in the MDU and the GS was limited to drawing a large number of diverse plans: conducting organizational activities, operational, combat, commander, mobilization training, economic activities, use of equipment, logistics, technical, and other types of collateral. The basis for the compilation of these plans were decisions of the respective commanders of services of the AFU, heads of structural units of the MDU, and the GS. Each of these plans had a separate calculation for the needs of their resources, but they all were not consistent among themselves. Such non-concordance led to cost overruns and in some cases even to the accumulation of residues of resources at the end of the year. These residues were finally lost for the MDU, because they transferred to state-deferred revenue and did not return back. The allocation of resources to ensure the implementation of plans usually was subjective and proportional. Plans were drawn up before the beginning of each training year and could not be taken into account during the development of the defense budget, because of time differences. Thus, these plans were not financially provided, except for the protected budget programs (as salaries for personnel).

In addition, because of the inconsistency of the dates of commencement and completion of development of the previously-mentioned plans and key financial planning documents of the MDU, it was impossible to achieve optimality cost during the execution

of certain tasks because of the lack of cost basis. These issues were partially solved due to implementation of defense planning. All these aspects confirm the need for further improvement of the system of defense planning, which would be united by a common intention as to its organization and implementation, and coordination with budget planning.

D. INSTITUTION ESTABLISHMENT OF MDU AND GS

Effective support of military and economic security requires making optimal decisions on the development of forces, conducting continuous monitoring of the compliance of their current activities with the strategic goals, and adapting armed forces to the external environment through the formation and implementation of effective development programs. Current events in 2014 have demonstrated that the military organization of Ukraine has been unable to respond effectively to current challenges. The defense was not properly organized. The AFU, Security Service of Ukraine, Ministry of Internal Affairs, and Intelligence Service have been unable to be proactive. As a result, Ukraine has lost part of its territory. However, each event has its reasons and consequences. The loss of defense is not an instantaneous phenomenon. This phenomenon has led to human disorder, blind and continuous personnel downsizing, reform of the structural units in the MDU and the GS, and thoughtless reduction into military units.

This section provides a discussion about the development of structure of the MDU and the GS, and failures associated with the reformation of the bodies of military authorities and their activities.

1. Development of Structures of the Ministry of Defense of Ukraine and the General Staff of Armed Forces of Ukraine

Since 1991, Ukraine has received considerable military resources. In particular, within the territory of the state,⁶⁶ resources include three arms and two tank armies, army corps, four air armies, separate army air defense, missile army, and part of the black sea

⁶⁶ “21 the Armed Forces of Ukraine: History, Achievements, Perspectives.” *To Help the Commander*, <http://vyhovna-robota.blogspot.com/2012/12/21.html>.

fleet. In general, Ukraine has had different military formations of up to 900,000 soldiers, about 6,500 tanks, 7,000 armored vehicles, 1,500 planes, 350 ships, 1,272 nuclear warheads (intercontinental missile base), and 2,500 units of tactical nuclear weapons. Thus, such a military heritage allowed for the creation of a powerful national army, which was able to ensure the safety and integrity of the territory. The sale of surplus property and AME could obtain sufficient funds for the modernization of the AFU.

However, twenty-three years after Ukraine's independence, the AFU was not close to combat readiness nor able to fulfill its main function: to protect the territory against external aggressors. Why did this happen? First, the army and state security have never been priorities of the president or the VRU. Thus, the AFU was always a low priority to the state. The army, as a state institution, has never been interested in the political-military leadership of Ukraine since independence. The lack of attention was due to a favorable geopolitical situation that has led to neglect in all military formations of the state. In addition, the suspension of political-military leadership from the problems of the AFU reduce Ukraine's ability to protect itself.

Next, the most problematic consequence of such a political-military leadership of the state was the uncertainty of accession to the system of collective security (continuous changes of views from 2002 to 2010) that led to the attainment of non-aligned risky status. Thus, there was a gradual, deliberate, and conscious simplification of the whole security sector, which led to catastrophic personnel issues. Political appointments drained professionalism from the force starting with leadership at the highest level. Appendix B shows the timeline of the Ministers of Defense of Ukraine during the independence of Ukraine. When in 2010 Viktor Yanukovich⁶⁷ became a president of Ukraine, people who occupied key positions (with his consent) held frankly pro-Russian views, some actions of which were aimed at destroying the defense potential of Ukraine. Only for the last four years (2010–2014), eight Ministers of Defense have been replaced (five—just in 2014). That cannot be considered normal. Moreover, very seldom did a Minister of Defense have appropriate professional qualification as a manager and an understanding of defense

⁶⁷ Wikipedia, s.v, "Viktor Yanukovich," last modified December 14, 2014 https://en.wikipedia.org/wiki/Viktor_Yanukovich.

reform. Thus, there was a lack of responsibility in defense building, and no political understanding or willingness to make changes. This unfortunate trend has led to a lack of strategic planning and compliance with any plans. Since the Ministers of Defense have been unqualified (since the end of 2007), it led to the failure of a number of state programs related to the development of the AFU.

Next, defense authorities in Ukraine have never been appropriately punished for their responsibility in the failure of these or other plans. This resulted in the absence of appropriate leadership of the military sphere. Moreover, every newly appointed Minister of Defense or Chief of the GS develops new reforms and developments of the AFU that usually contradict previous programs.

In addition, the authority of the MDU and the GS carried out organizational and practical measures to change the structure and the number of troops and military bodies, which led to a substantial decrease in the intensity of combat training, reducing the serviceability of the AME. The reformation of the AFU has continued since its formation in 1991, primarily aimed at reducing the number of troops, and changing the structure of management groups and other military units. The military-political leadership of Ukraine is constantly saved by the army, consciously implementing the strategy to shift funding for the fourth quarter of the year. That means that a significant part of financial resources was returned to the state budget, because of the impossibility of its being used due to the long timetable for procurement procedures. Thus, even at a low overall level of financing defense needs, real financial plans have almost never been enforced.

Finally, corruption permeated all levels of the defense and security sector and especially affected the AFU. Despite informing the public (through the mass media), almost none of the official security sector, including the AFU, have been held responsible for their actions or inaction. Mostly this issue is due to legislation gaps and undefined responsibility.

The structure of the MDU changed almost every year, especially from the beginning of defense planning. According to the first *White Book 2005*,⁶⁸ MDU did not have a very broad structure, but had five positions of Deputy Minister of Defense (one—First Deputy). However, the number of departments and units which reported directly to the Minister of Defense rose gradually.⁶⁹ In 2010, beginning with the presidency of Viktor Yanukovych,⁷⁰ the MDU had seven positions of the Deputy Minister of Defense (one—First Deputy).⁷¹ However, the next year it was just three positions. Thus, a rhetorical question arises: Why was it necessary to create seven positions for just one year?

In the last decade, the structure of the GS changed substantially and became closer to NATO standards (compared with its structure in 2005,⁷² 2009,⁷³ and 2013.⁷⁴ Although the MDDMP (J-5) almost meets the needs of the AFU in compliance with quantitative indicators, the majority of its tasks are not related to defense planning, but to organizational measures, accounting for the deployment of troops, mobilization, and so forth. The previously-mentioned decisions over reorganization only led to the formal reassignment of personnel to new positions without gaining the ability of the newly created controls or managements to perform tasks on assignment.

⁶⁸ Ministry of Defense of Ukraine, “The Armed Forces of Ukraine.” (White Book, 2005), 19 <http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?id=155212&lng=en>.

⁶⁹ This information is in annual White Book “The Armed Forces of Ukraine,” that can be found at <http://www.isn.ethz.ch/kmssearch/search/simpleall>.

⁷⁰ *Wikipedia*, s.v, “Viktor Yanukovych,” last modified December 14, 2014 https://en.wikipedia.org/wiki/Viktor_Yanukovych.

⁷¹ Ministry of Defense of Ukraine, “The Armed Forces of Ukraine.” (White Book, 2010), 67. <http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?id=156823&lng=en>.

⁷² Ministry of Defense of Ukraine, “The Armed Forces of Ukraine.” (White Book, 2005), 39. <http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?id=155212&lng=en>

⁷³ Ministry of Defense of Ukraine, “The Armed Forces of Ukraine.” (White Book, 2009), 78. <http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?id=155181&lng=en>.

⁷⁴ Ministry of Defense of Ukraine, “The Armed Forces of Ukraine.” (White Book, 2013), 66. http://www.mil.gov.ua/content/files/whitebook/WB_2013.pdf.

2. Failures Associated with the Reformation of the Bodies of Military Authorities and their Activities

In 2003, for the first time in its independence, Ukraine clashed with armed aggressors. Troops unprepared to go to war, weak training of commanders and soldiers, the outdatedness of existing equipment, and lack of proper equipment and weapons unnecessarily spilled the blood of many Ukrainians. On the one hand, the new type of war against Ukraine and the ATO revealed a number of problems not only at the AFU, but at almost all security sector agencies—the Security Service, the Ministry of Internal Affairs, State Border Service, Intelligence and counter-Intelligence agencies. On the other, the war began due to the extraordinary and an unprecedented weakening of the AFU.

There are many convincing pieces of evidence that the Russian Federation did not start the war against Ukraine because of the conditions of preservation and development of defense capabilities. Of course, in this context, it could be noted that the shortsightedness of the presidents, as well as the indifference and inaction of all governments, without exception, led to the loss of defense capability and put the existence of the Ukrainian state as a whole on the line. Of particular concern is the lack of responsibility of civilian and military leaders of the military authorities for the preparation and implementation of defense planning documents. This was facilitated by the fact that none of the governments has held a deep revulsion of the results of the activity of the MDU on the implementation of state programs for reforming the AFU. Moreover, very often the heads of state and government and ministers of defense resorted to populist statements. These statements harmed the morale and fighting spirit of the army, undermined the authorities' credibility, and worst of all, served as a cover for corruption. Unfortunately, an irresponsible attitude to the development of defense capabilities has permeated all levels of power, from presidents and prime ministers to commanders of military units or heads of directorates of the AFU. However, the question of personal responsibility for carrying out unexpected events and wasting public funds on responsible persons was never addressed.

The military-political authorities of the state watched the corruption in the AFU, and sometimes (during the presidency of Viktor Yanukovich⁷⁵) directly encouraged military leaders to engage in corrupt practices. The AFU has dominated the Soviet defensive mentality, which is the product of a bygone era and has always been hindered from moving forward by the Ukrainian army. Ukrainian academic military school, which was created on Soviet principles, still has significant impact on personnel. That is why human lawlessness still exists that took place in the AFU from the very beginning of military personnel education.

Unresolved problems remain in the AFU regarding the manager of the forces: (1) a significant number of supervisors were created; (2) excessive centralization decreased the initiative and independence of subordinates; (3) excessive paperwork emerged, where the bureaucracy created unnecessary paperwork for its own sake.

Actually, in previous years Ukraine had gained considerable experience in defense planning, but Ukraine's results, embodied in the relevant programs, remained far from ideal. Such programs often present overly ambitious goals and measures not based on a real assessment of the economic, technological, and production capabilities of the state. Moreover, the time required for their implementation was not taken into account. Thus, these necessities required these activities to be postponed and often canceled.

At the end of December 2014, military-economic training "Concentration—2014" took place, and the president of Ukraine, P. Poroshenko, noted⁷⁶ that the military-political and military-strategic situation around Ukraine remained tense; events at Donbass required adequate response and measures aimed at solving problems in the protection and restoration of the sovereignty, territorial integrity of Ukraine. Poroshenko stated the following: "Everyone in terms of the starting of active attacks against our country should know their place, functions, and tasks, not to show confusion, but to have a clear plan of action. This applies to the leadership of public authorities and heads of

⁷⁵ *Wikipedia*, s.v, "Victor Yanukovich," last modified December 14, 2014 https://en.wikipedia.org/wiki/Viktor_Yanukovich.

⁷⁶ "The President Took Part in Military-Economic Training "Concentration—2014," *Press-service of the President of Ukraine*, December 23, 2014 <http://www.president.gov.ua/ru/news/31977.html>.

regional state administrations.”⁷⁷ Poroshenko emphasized⁷⁸ that Ukraine has not paid enough attention to the defense sector, which has led to a lower level of defense. According to him, this was the reason for the violation of the territorial integrity of the state. After all, if Ukraine had had an adequate level of training for the AFU, and the ability to recover, of course the situation would have developed differently.

E. CONCLUSION

This chapter discussed the development of strategic planning, the failure of the state defense programs, the advance of short-term planning, and the establishment of planning structures in the MDU and the GS. The improvement of the system of defense planning requires taking the previous implementation experience in the AFU into account: materials consultation with the military experts of the leading Western countries, as well as practical experience gained during the training of officers of the GS in the departments of defense planning of the armed forces of foreign countries.

At present, it is necessary to ensure the full integration of long-term, middle-term, and short-term planning, taking into account the available funding. In the existing system of defense planning, strategic documents based on the failed Military Doctrine limit further development. Long-term military planning has actually dropped out of the total planning process in the development of the AFU. The system still values the Military Doctrine, not for the concept, but to use as a slogan to follow during Soviet times. Thus, the MDU and the GS should inform the government about the counterproductivity of the Military Doctrine, so it can be canceled.

Middle- and short-term components of defense planning also need substantial revision and improvement. They actually exist today in parallel: separated, and even independent from each other. Currently, the only document of military planning which to some extent is created independent of any obstacle in the yearly planning cycle is an annual PMD (for the executive year). However, due to the gap between MDU budget estimates for the AFU and the approved budget, the plans experienced hasty changes

⁷⁷ Ibid.

⁷⁸ Ibid.

which devastated their effectiveness. As a result, the PMD is constantly changing; planned measures are transferred, postponed, or cancelled; and funds are redistributed manually without any analysis of possible consequences for the future. This completely destroys the system of defense planning. However, this is the only document closely related to budget planning and budgeting at the ministerial and state level.

Finally, the thoughtless personnel reductions of the MDU and the GS made the AFU unable to fulfill its tasks. Weak military-political leadership and massive corruption hampers defense development.

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III. CONDUCTING DEFENSE REVIEWS: HOW IT SHOULD WORK AND WHY THEY DO NOT ACTUALLY WORK

The DR is a complex process and has a lot of challenges, especially if the country is from a post-Soviet Union region. The DR is not a document, but a process. The practice of conducting reviews shows that the majority of DRs are not successful.

In August 2011 at the Center for Strategic and International Studies, a conference was provided “to consider how to best guide partner states through the strategic defense review (SDR) process.”⁷⁹ The main point was to develop some “approaches, procedures, frameworks, and tools to enhance future defense institution building projects... [and help to] structure and execute strategic defense reviews ... tailored to meet their [international nations] individual needs.”⁸⁰

Above all, what is the DR? First, it is a process. The DR is a very hard and complex process that provides a formal examination of defense objectives and challenges, capacity and capability, effectiveness and efficiency, and—significantly—makes an effective future defense policy within resources and force structure constraints. Although the results of this process could be formulated in a document, it does not mean that the DR is successful. Thus, if the DR fails, the document is worthless. “A successful SDR identifies an important defense mission that derive from key overarching defense requirements... the military capabilities essential to performing those missions effectively and the resource mechanisms necessary to provide those capabilities.”⁸¹

This chapter provides some causes for the failure of the DR. First, the unwillingness of the government (or military authorities) to define a clear defense policy and make changes is responsible for such failure. After the Cold War, a majority of countries made policies (including defense) under conditions of uncertainty and with

⁷⁹ Jennifer M. Taylor, Emily Boggs, *Strategic Defense Reviews: Procedures, Frameworks, and Tools to Enhance Future Defense Institution Building Project* (ISBN 978-0-89206-670-4) (Washington, DC: Center for Strategic and International Studies, September 2011), http://csis.org/files/publication/110930_Taylor_StratDefRev_WEB.pdf.

⁸⁰ Ibid.

⁸¹ Ibid.

financial constraints. Second, with or without a new strategy, the government makes an attempt to build new forces on the old foundation without links between them. The success of force transformation depends on how the foundation was laid, and, of course, how it was supported by available resources. Third, the absence of experienced experts and planning tools played a typical role in Post-Soviet countries. In this case, the assistance of international advisors is very helpful, but can yield results if authorities only desire to fulfill the task. Fourth, using post-Soviet (so-called Eastern) assumptions and concepts made it nearly impossible to build new efficiency on the old bases. Delivering the Western strategy, decision-making process, and defense planning using the Eastern model as a base and tool does not work. Fifth, the centralization of authority saps initiative and critical thinking; in this case, the DR has never been successful. Sixth, without a balance among force structure, capability, and resources, especially in finance, it is impossible to prevail and provide necessary strategy. Finally, the lack of responsibility, collaboration, and transparency held the DR back from success.

This chapter discusses the failure of the DR based on British and American practices, and mistakes in analysis in the DR in Ukraine.

A. EVOLUTION OF BRITISH DEFENSE REVIEW

The UK practice of the DR has almost always been conducted under fiscal pressure. Thus, “the ‘Treasury-led defense review’ has long been code for a range of policy errors and misjudgments: a failure to comprehend the vulnerability of the UK and its interests in this or that security challenge; a willingness to prioritize domestic (and vote-winning) spending over national security; and general ignorance of strategic and military matters.”⁸² The evolution of the British DR is better discussed by dividing it into two periods: the Cold War, and afterward. The purpose is to address the different defense policies: capability-based and threat-based, respectively. However, the introduction in 2010 of a new idea about a shift to a risk-based strategy could provide a third period.

⁸² Paul Cornish and Andrew M. Dorman, “Fifty Shades of Purple? A Risk-Sharing Approach to the 2015 Strategic Defence and Security Review,” *International Affairs*, May 2013, 1183.

The first period covers the timeframe from 1948 till 1990. This period of UK history was beset by financial crisis, a growing military relationship (even dependence) with the USA, the Cold War, the creation and sustenance of a nuclear deterrent, and a desire to have influence on the world stage. During this time, six reviews took place.

After World War II, the first significant strategic document was the Three Pillars Strategy in 1948 that was based on three main assumptions for national security: “protecting the United Kingdom; maintaining vital sea communications; and securing the Middle East as a defensive and striking base against the Soviet Union.”⁸³ However, the oversight was that changes cannot occur immediately; they need resources and time. Thus, in spite of economic decline, the issue of the Korean War induced the UK to approve the 1950 Defense Policy and Global Strategy Paper (DPGSP) which actually implemented the Three Pillars Strategy and based it on a three-phase strategy: (1) nuclear deterrence policy, (2) establishing NATO’s conventional forces, and (3) sustain conventional and atomic weapons from the air. These phases were stipulated by the cooperation with NATO and EU against the Soviet Union. With this in mind, the British government decided to fast-track military programs and significantly increase the budget. Thus, as an elaboration of the last document in 1952, the next DPGSP was approved. The significance of that document was a policy shift at two levels: “the balance between Hot and Cold War”⁸⁴ and “changes the balance of conventional forces, with land and air forces being given priority.”⁸⁵ However, though all these documents provided a first attempt at the British DR, the shortcomings were not due to the first effort but to a poorly thought-out strategy of defense development—lacking a link between existing forces and structure and planning. The reason could be the weak position of the Ministry of Defense against three Service Chiefs at that time.

The second review was represented by the 1957 Defense White Paper. Due to the Suez Crisis in 1956 and the following financial crisis, this White Paper used the Three

⁸³ Andrew Dorman, “Crises and Reviews in British Defence Policy,” *Britain and Defence 1945–2000; a Policy Reevaluation*, 2001, 10.

⁸⁴ *Ibid.*, 11.

⁸⁵ *Ibid.*

Pillars Strategy as an assumption of the full implementation of the 1950 DPGSP, but omitted the second stage and focused on British nuclear forces. The review provided significant force reduction for cost-saving purposes. The weight of conducting the 1957 Defense White Paper was running it “through the Ministry of Defence (MoD) and sought to override the Service departments. This was a significant step for the MoD’s development and represented quite a considerable coup for the department against the previously all-powerful Service departments.”⁸⁶

During 1958–1969, the so-called Nuclear Review was conducted. It was not official, but a significant shift happened in the UK by 1969 “had become entirely dependent upon the United States for the provision of its strategic nuclear platform, although the government emphasized that it retained operational independence.”⁸⁷ However, in 1964, due to the Labor government, the defense policy was changed to emphasize conventional rather than nuclear forces. Series of the so-called Healey Reviews⁸⁸ were focused on procurement, but due to insufficient results, the military dimension of policy was changed through the programs. These changes and the financial crisis in the UK forced significant removal of forces deployed outside Europe. The result led the UK to “the beginning of the withdrawal [forces] from East of Suez and the downplaying of the world role.”⁸⁹

The next review—the Mason Review—was the implementation of the previous ones. In 1974, the conservative government made the decision “to concentrate the British defence effort on NATO and the independent nuclear deterrent.”⁹⁰ Moreover, due to the necessity of saving costs, the Mason Review “marked the end of Britain’s world role with the virtual elimination of Britain’s out-of-area capability and the withdrawal of many of the residual forces deployed beyond Europe.”⁹¹

⁸⁶ Ibid., 13.

⁸⁷ Ibid., 15.

⁸⁸ Ibid.

⁸⁹ Ibid., 17.

⁹⁰ Ibid., 18.

⁹¹ Ibid.

Finally, in 1981, the so-called Nott Review “was never formally a review but instead a realignment of forces to meet the financial situation of the time.”⁹² Moreover, “the changes under Nott marked the fruition of trends begun by Healey and continued by Mason.”⁹³ Two continental and maritime commitments to NATO were defined as saving costs. This policy was not a critical breakpoint, but that time the MoD “was to achieve a fully integrated defence policy.”⁹⁴

The second period started in 1991 with the disintegration of the Soviet Union, which brought new uncertainty to defense policy and not just to Britain. The 1991 White Paper provided the Options for Change. Distinguishing this review was the strategic vacuum during its operation, and because of that, the government did not claim an official defense policy. However, Options for Change “began the shift towards a capability-based rather than threat-based defence policy”⁹⁵ and, despite the keeping all three Services uncharged, they were to be reduced again. Moreover, the positive issue here was that due to the government actually keeping itself aloof from defining defense strategy, the Services could decide reductions on their own.

As previously mentioned, the Treasury led almost all DRs in the UK. The end of the Cold War happened alongside an economic recession. At that time, the purpose of the DR was to evaluate every pound of defense spending to ensure its efficiency. Because of a still uncertain defense policy, the shifting to a capability-based planning, and the financial crisis, three points led this review: (1) quantifying defense activity, (2) running defense institution privatization through the Private Finance Initiative, and (3) increasing defense capability by significantly decreasing costs. Thus, the Defense Costs Study in 1994 “was conducted and run largely by the Top-Level Budget Holders in conjunction

⁹² Andrew Dorman, “Crises and Reviews in British Defence Policy,” *Britain and Defence 1945–2000*; a Policy Reevaluation, 2001, 19.

⁹³ Ibid., 20.

⁹⁴ Ibid.

⁹⁵ Ibid., 21.

with the Secretary of State for Defence,”⁹⁶ and consequently this review did not have enough coordination and management.

The SDR of 1997/98 was actually the best attempt of the DR and provided defense requirements through 2015. Grattan⁹⁷ shows the structure of the SDR and how it was conducted and analyzed using different tools. This SDR was part of an election manifesto of the Labor government in 1997, so the government was an interested party in it. Five groups were involved in the process⁹⁸: (1) the working group, (2) the internal studies group (these first two groups include representatives from other government departments), (3) the policy and planning steering group, (4) the financial and policy management group, and (5) the cabinet. Grattan describes the logical structure for the planning assumption of the SDR: “foreign policy → defense policy → roles, missions, tasks → resources.”⁹⁹ Thus, the policy framework was based on foreign policy guidance and “formed the basis for future work to ‘identify the specific force structures, capabilities, equipment and support required.’”¹⁰⁰ Then this framework was translated into defense policy with a set of planning assumptions. The working groups should to address the following questions¹⁰¹: Planning for what? With and against whom? Where? By whom? To do what? Based where? How many concurrent operations? What about other attendant structure? (Crisis Management Structure, Rapid Deployment Forces, NATO Reaction Forces, Reserves).

The next point about roles, missions, and tasks had several segments:¹⁰² nuclear forces, conventional forces (policy framework and structures, capabilities, and equipment), infrastructure support, procurement policy, and efficiency (assets). The important point was as follows: “Resources were considered last because the process was

⁹⁶ Ibid., 22.

⁹⁷ Robert F. Grattan, *Strategic Review: The Process of Strategy Formulation in Complex Organizations* (Burlington: Ashgate Publishing Company, 2011).

⁹⁸ Ibid., 88.

⁹⁹ Ibid., 85.

¹⁰⁰ Ibid.

¹⁰¹ Ibid., 85–86.

¹⁰² Ibid., 86.

to be policy, not resources, led.”¹⁰³ It was clever, because, as Grattan rightly noticed: “If the defence policy was derived logically from needs of foreign policy, the Review, it was felt, could not be accused of following earlier examples by being constrained to produce a defence policy that matched a preordained budget.”¹⁰⁴ Moreover, the SDR was the most open review, but not just by date. It had significant external inputs from three sets of seminars that were open for everyone who wanted to be involved. To sum up, though SDR was based on previous defense roles and military tasks, it was a complex process that contained a lot of structural changes, involvement of other agencies and civilians, new technology, long-term procurements commitments, introduction of defense diplomacy (as a new mission). In addition, “SDR has achieved ... the realigning of the three dimensions of policy with one another.”¹⁰⁵

Finally, in 2010, the British government represented a new National Security Strategy and Strategic Defense and Security Review (SDSR). Besides an uncertain strategy and defense restructuring for budget-cutting decisions, the SDSR introduced a couple of significant policy changes: a five-year cycle for conducting the SDSR (notice the incompatibility with the three-year cycle for the government’s spending review), and the idea of shifting to a risk-based strategy. After one year, in 2011, SDSR was examined in the movement of execution in 2010 and forward outlook how well 2010 was executed and analyzed the effectiveness of future SDSR.¹⁰⁶ Thus, there were some challenges of execution claimed in three directions¹⁰⁷: (1) “Government and Industry in the Future”¹⁰⁸: to modernize existing weapons platforms for cost-saving could lead to loose capability and increase support cost; (2) “Short-Term versus Long-Term Equipment Needs and

¹⁰³ Ibid., 87.

¹⁰⁴ Ibid.

¹⁰⁵ Andrew Dorman, “Crises and Reviews in British Defence Policy,” *Britain and Defence 1945–2000*; a Policy Reevaluation, 2001, 24.

¹⁰⁶ Sameer Punyani, “The Economics of National Defence in an Age of Austerity,” *Chatham House*, October, 17, 2011, <http://www.chathamhouse.org/sites/files/chathamhouse/public/Research/International%20Security/171011report.pdf>.

¹⁰⁷ Ibid., 3–5.

¹⁰⁸ Ibid., 3.

Force Structures”¹⁰⁹: to find a balance between high-cost, long-term procurements and the needs for current operations; and to restructure the armed forces subject to keeping fighting capability and readiness; (3) “UK Engagement in the World”¹¹⁰: besides national interests, for the protection of national value, the UK should have much wider commitments and engagement; and uncertainty of future defense scenarios. At the projected outlook some challenges in five directions¹¹¹ were noted:

(1) “Government and Industry in the Future”¹¹²: an emphasis on short-term purchases could impair long-term contracts, and use the interoperability of equipment and sharing of logistic and support system;

(2) “Alliances, Partnerships and the Relationship with the United States”¹¹³: to find a balance between cost-saving and remaining capability into international cooperation, and to manage national value and interests object to uncertainty NATO and U.S.-UK relations;

(3) “Government Staffing and Armed Forces Command Structures”¹¹⁴: armed forces adaptation for a new command structure (Join Forces Command) and personnel changes (including cutting), misunderstanding of the restructuring and transformation of the armed forces, challenging in an attempt to enlarge the budgeting responsibility;

(4) “Future Procurement and Force Development”¹¹⁵: budget challenges for short-term issues—equipment that will be returning from Afghanistan—and long-term – equipment platform: replacement or updated;

(5) “The Use of Non-Military Power”¹¹⁶: despite the importance of defense diplomacy, the challenge of dividing responsibilities and budgets. Thus, the next SDSR in 2015 has a good basis for beginning.

¹⁰⁹ Ibid., 4.

¹¹⁰ Ibid., 5.

¹¹¹ Ibid., 6–9.

¹¹² Ibid., 6.

¹¹³ Ibid.

¹¹⁴ Ibid., 7.

¹¹⁵ Ibid., 8.

During all reviews mentioned previously, the clear goal was to cut the budget due to the reduction of armed forces and to withdraw forces outside, but retain fighting capability. The evaluation of the DR process started based on a capability-based strategy, then shifted to a threat-based one, and finally is likely to shift to a risk-based strategy. However, the unwillingness of the government and high military authority to provide real changes (not just cost-saving) bring almost all DRs to failure.

B. EVOLUTION OF THE USA DEFENSE REVIEW

With the end of the Cold War era, many changes occurred in the United States in the defense sphere, including the national threats and interests, national and military strategy, and forces structure and personnel—and, of course, everything was under the budget limitation.

In 1989, the first significant DR—the Base Force—was conducted. “The changes to strategy and force structure that were developed under the Base Force were designed to meet the defense needs of the post-Cold War era by replacing Cold War strategy, which had focused on deterrence of Soviet aggression and had relied on forward defense, with a new strategy focused on regional threats and forward presence.”¹¹⁷ This review represented a significant reduction:¹¹⁸ for force structure—25%, in budget authority—about 10%, in manpower—more than 20%. The Base Force was based on “a regionally based strategy that emphasized deterrence, forward presence, and crisis response.”¹¹⁹ However, this review could not stop a defense budget reduction, and led “to a widening gap between strategy, forces, and resources and setting the stage for a number of hard choices that would need to be faced in the out years, with modernization and readiness of the force being the main ones.”¹²⁰

¹¹⁶ Ibid.

¹¹⁷ Eric V. Larson, David T. Orletsky, Kristin Leuschner. *Defense Planning in a Decade of Change: Lessons from the Base Force, Bottom-Up Review, and Quadrennial Defense Review*. (Santa Monica, CA, RAND, 2001) http://www.rand.org/content/dam/rand/pubs/monograph_reports/2007/MR1387.pdf, 5.

¹¹⁸ Ibid.

¹¹⁹ Ibid., 39.

¹²⁰ Ibid.

In 1993, another review was conducted called the Bottom-Up Review (BUR). It stated: “[T]he aim of the BUR was to provide ‘a comprehensive review of the nation’s defense strategy, force structure, modernization, infrastructure, and foundations.’”¹²¹ Actually, this review was based on a previous one: continue force structure and manpower reduction and decrease the defense budget. However, “the BUR redefined the meaning of engagement, giving increased rhetorical and policy importance to U.S. participation in multilateral peace and humanitarian operations and setting the stage for an increased operational tempo and rate of deployment, even as force and budgetary reductions continued.”¹²² This review failed and suffered a lot of criticism. Thus, policy analysts¹²³ discovered at least seven shortcomings: (1) the proposed force structure had not been balanced with the available defense budget; (2) the force capabilities were overrated; (3) there was decreasing expenditure on procurement, operation, and maintenance, “increasing the tempo of operations by expanding commitments,”¹²⁴ which led to the creation of a “hollow force”¹²⁵; (4) an obsolete system without perspective replacement led to a technology gap; (5) a continuation to decrease expenditure on the missile defense program; (6) the “force lacks a sufficient capability to project maritime power overseas;”¹²⁶ (7) the sham confirmation of cutting the defense budget under the government vision. Moreover, policy analysts claim that failure of the BUR is “based on faulty assumption concerning the mission of the armed forces.”¹²⁷ “the shape and size of U.S. forces should be based on peace enforcement and intervention,”¹²⁸ and “the ‘armed

¹²¹ Ibid., xviii.

¹²² Ibid.

¹²³ Larence T. DiRita, Baker Spring, and John Luddy, “Thumbs Down to the Bottom-Up Review,” *The Heritage Foundation*, September, 24, 1993, <http://www.heritage.org/research/reports/1993/09/bg957nbsp-thumbs-down-to-the-bottom-up-review>.

¹²⁴ Ibid., 5.

¹²⁵ Ibid. p. 4.

¹²⁶ Ibid. p. 6.

¹²⁷ Ibid. p. 8.

¹²⁸ Ibid.

forces... can play a significant role in' addressing 'economic danger to our [the USA] national security.'"¹²⁹ Thus, the armed forces created were unaffordable at that time.

The next attempt at the DR in the United States was the first Quadrennial Defense Review (QDR) which was conducted in 1997¹³⁰ and was based on threat-based planning. The decision about the four-year DR cycle was made later in 1999.¹³¹ Thus, the Department of Defense (DOD) should conduct "a comprehensive examination (to be known as a "quadrennial defense review") of the national defense strategy, force structure, force modernization plans, infrastructure, budget plan, and other elements of the defense program and policies of the United States with a view toward determining and expressing the defense strategy of the United States and establishing a defense program for the next 20 years."¹³² First, fourteen specific issues were defined for the DOD, such as "a comprehensive discussion on the national defense strategy of the United States and the force structure best suited to implement that strategy at a low-to-moderate level of risk."¹³³ The important issue in conducting the QDR is that the Government Accountability Office (GAO) provides an assessment of each QDR and shows main critical points which the DOD tries to improve in the next QDR.

For the 1997 QDR, the GAO reported more than ten critical points,¹³⁴ which include (1) the lack of full alternative analysis does not provide suitable force structure for the defense strategy implemented; (2) despite wide analysis of possible military operations and the potential impact of key assumptions, force assessment was based on the BUR; (3) "only one of the three major force assessments modeled any force structure

¹²⁹ Ibid.

¹³⁰ National Defense Authorization Act for Fiscal Year 1997, Pub. L. L.№ 104–201 §923 (1996).

¹³¹ Ibid.

¹³² The National Defense Authorization Act for Fiscal Year 2000, Pub. L. № 106–65 § 90i (1999), codified at 10 U.S. Code § 118, <https://www.law.cornell.edu/uscode/text/10/118>.

¹³³ Quadrennial Defense Review: Future Reviews Could Benefit from Improved Department of Defense Analyses and Changes to Legislative Requirements (GAO-07-709) (Washington, DC: Government Accountability Office, 2007), 9, <http://www.gao.gov/products/GAO-07-709>.

¹³⁴ Quadrennial Defense Review: Opportunity to Improve the Next Review (GAO/NSIAD-98-155) (Washington, DC: Government Accountability Office, 1998), <http://www.gao.gov/products/NSIAD-98-155>.

alternatives;”¹³⁵ (4) no full analysis of “the potential effects of new technologies and war-fighting concepts on DOD’s planned force structure;”¹³⁶ (5) “this approach did not always provide a mission focus that examined trade-offs or facilitated a fundamental reassessment of modernization needs in light of emerging threats and technological advances;”¹³⁷ (6) “the modernization and force assessment panels conducted most of their work independently and concurrently, which hampered their ability to explore linkages and trade-offs between force structure and modernization alternatives.”¹³⁸ In addition, the failure causes of this QDR were an absence of balance between strategy, forces, and resources and an underestimation of resources; as a result, there was a lack of defense expenditures.

In 2001, the QDR had already produced a four-year cycle. The DOD introduced 4 more areas of risks in the QDR¹³⁹: operational, force management, future challenges, and institutional. The GAO discovered that the increasing involvement of high authorities “led to the development of a new defense strategy that underscores the need to transform the forces to better meet the changing threats of a new security environment.”¹⁴⁰ However, the weaknesses of this review were vague legislation and an overly tight timetable. Additional weaknesses included “not always a clear link between the study team assignments and the legislatively required issues; the thoroughness of the analysis on these required issues varied considerably; and the assessment of force structure needs had some significant limitations.”¹⁴¹ Thus, comprehensive information was not provided, and the “DOD lacks assurances that it has optimized its force structure and investment

¹³⁵ Ibid.

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Quadrennial Defense Review: Future Review Can Benefit from Better Analysis and Changes in Timing and Scope (GAO-03-13) (Washington, DC: Government Accountability Office, 2002), <http://www.gao.gov/products/GAO-03-13>.

¹⁴¹ Ibid.

priorities to balance short-term and long-term risks.”¹⁴² Thereby, the first issue here, in cycle review, is to adjust the legislation, the QDR’s scope and agenda.

In 2006, the QDR and subsequent reviews were claimed to have been based on capability-based planning, but the continued budget-driven defense planning process of the United States makes this assertion problematic. This shift became a problem due to the absence of necessary guidelines and instructions. The GAO defined the following strengths of the QDR: “sustained involvement of senior DOD officials, extensive collaboration with interagency partners and allied countries, and a database to track implementation of initiatives.”¹⁴³ However, these strengths were counterbalanced by the following weaknesses: “DOD did not conduct a comprehensive, integrated assessment of different options for organizing and sizing its forces to provide needed capabilities...; DOD did not provide a clear analytical basis for its conclusion that it had the appropriate number of personnel to meet current and projected demands...; the risk assessments... did not fully apply DOD’s risk management framework because DOD had not developed assessment tools to measure risk.”¹⁴⁴ Thereby, due to the lack of guidance, new planning had an “approach that focuses on capabilities to meet a range of threats rather than on the allocation of forces for specific adversaries.”¹⁴⁵

In 2010, the QDR represented a new strategic plan based on an analysis of current operations (in Afghanistan and Iraq) and directed at developing capabilities to meet threats in the future. Again, fiscal issues play a main role in the QDR, especially in the long-term perspective. The 2010 QDR based on the 2008 National Defense Strategy “described an environment shaped by globalization, violent extremist movements, rogue and unstable states, and proliferation of weapons of mass destruction.”¹⁴⁶ Three different

¹⁴² Ibid.

¹⁴³ Quadrennial Defense Review: Future Reviews Could Benefit from Improved Department of Defense Analyses and Changes to Legislative Requirements (GAO-07-709) (Washington, DC: Government Accountability Office, 2007), <http://www.gao.gov/products/GAO-07-709>.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

¹⁴⁶ Quadrennial Defense Review: 2010 Report Addressed Many but Not All Required Items, (GAO-07-575R (Washington, DC: Government Accountability Office, 2010), <http://www.gao.gov/products/GAO-10-575R>.

sets of scenarios were evaluated for forces in the midterm. However, the GAO reported that “of the 17 required reporting items, DOD addressed 6, partially addressed 7, and did not directly address 4.”¹⁴⁷ The last one “included items addressing the anticipated roles and missions of the reserve component, the advisability of revisions to the Unified Command Plan, the extent to which resources must be shifted among two or more theaters, and the appropriate ratio of combat to support forces.”¹⁴⁸ Moreover, the GAO claimed that its conclusion and recommendations for the last QDR needed to remain the same in this review. Thus, the DOD did not consider that the GAO opinions and last pitfalls obtained new problems to the pitfalls noted in the last review.

Besides the failure of QDRs in the United States, its advantages were the involvement of civilian and military advisers and the GAO assessment of each review to avoid future mistakes. However, as in the UK practice, the DR in the United States failed too. The issue here is the DOD’s unwillingness to accept recommendations and attempts to make a significant force transformation, but remaining status quo for the majority of the defense program. Moreover, the necessity of continuous update guides, and instructions for development and conducting the DR, creates additional problems.

C. MISTAKE ANALYSIS OF CONDUCTED DEFENSE REVIEW IN MDU

The DR in Ukraine is understood as a special strategic monitoring and analysis procedure during the strategic planning process. The result of the DR should be the main information base for the development of the National Security Strategy and for strategies of each component of national defense security, including War Security Strategy. However, current legislation does not properly define the mechanism of review, because no unified methodology nor approaches to implementation have been specified. The only exception is the sphere of defense and military building.¹⁴⁹

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

¹⁴⁹ Verkhovna Rada of Ukraine, the Law of November 18, 2004, № 2198-IV, article 9, *About the Organization of Defense Planning*. <http://zakon4.rada.gov.ua/laws/show/2198-15>.

The need for the DR stipulates the following: (1) emergence of new threats to the national interests of Ukraine as a result of changes in the military-political situation; (2) revision of the guidance of the state policy priorities of Ukraine on foreign and domestic policy in the sphere of national security and defense; (3) specification of strategic objectives for the development of the AFU and other components of the security and defense sector, and other reasons, which will significantly impact the national security and defense of Ukraine.

For the first time in Ukraine, the DR was conducted in 2003–2004. It became the basis for the SDB¹⁵⁰ and *the State Program of the Armed Forces of Ukraine for 2006–2011*.¹⁵¹ The main disadvantages of this DR were as follows: low reliability and incomplete data, limitation of condition and prospects of reform, and development of only the AFU without the other agencies in this field. Evidence of the low reliability of the results of the DR is the significant difference between qualitative and quantitative indicators for the SDB¹⁵² and the *White Book 2005*.¹⁵³ The main reasons for these differences are the lack of effective mechanisms of strategic and defense planning at that time; including (1) strategic monitoring and analysis; (2) unwillingness and unavailability of OMF units to carry out DR; (3) poor coordination on the part of the NSDCU and the CMU; (4) the poor quality of the input data from primary sources; (5) poor scientific support—the lack of effective methods, techniques, and research models.

Thus, the first DR gave the Ukrainian army the opportunity to gain experience of systematic but not transparent defense planning in the state by the approximate standards in the leading countries of the world. According to the results of the DR, a series of

¹⁵⁰ President of Ukraine, Decree of June 22, 2004, № 670/2004, *About Decision of the National Security and Defense Council of Ukraine on June 17, 2004 “About Strategic Defense Bulletin Until 2015.”* <http://zakon4.rada.gov.ua/laws/show/670/2004>.

¹⁵¹ President of Ukraine, Decree of December 27, 2005, № 1862–25/2005 (restricted) *About Decision of the National Security and Defense Council of Ukraine on December 9, 2005 “About the State Program of Development the Armed Forces of Ukraine for 2006–2011.”*

¹⁵² President of Ukraine, Decree of June 22, 2004, № 670/2004, *About Decision of the National Security and Defense Council of Ukraine on June 17, 2004 “About Strategic Defense Bulletin Until 2015.”* <http://zakon4.rada.gov.ua/laws/show/670/2004>.

¹⁵³ Ministry of Defense of Ukraine, *“The Armed Forces of Ukraine.”* (White Book, 2005). <http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?id=155212&lng=en>.

reforms were made in 2005–2008. At the same time, through a series of circumstances, the review had certain shortcomings, which further adversely affected the implementation of its results. Actual defense expenditures were significantly lower, causing planned and initiated reforms to fail. First, equipping the army with modern AME was never completed. Next, problematic issues are recruitment for the army of contract military personnel, solutions for social problems of military personnel, and logistics. Thus, the development of realistic long-term development strategy of the AFU has failed and its management as well.

Actually, the first review contained only the inspection of the AFU, but at that time represented a significant achievement. From the first DR, changes in the security sphere around Ukraine and its policy have occurred. The situation in Ukraine today is much different from 2003–2004: the economic situation has changed, and the situation in the AFU has worsened, especially since 2009. New political realities faced by Ukraine require clearer directions and mechanisms for ensuring military security. The active phase of ATO is being conducted. Thus, the flaws are clearly visible not only in the defense planning, but in the training of personnel, mobilization training, the development of DIC, the existing strategic reserves, and other flaws.

The next attempt of the DR could be called the Comprehensive review of the security sector. This review had to cover all law enforcement agencies, and ought to be a basis for the creation of the National Security Strategy of Ukraine¹⁵⁴ in 2007. Unfortunately it did not, because it failed at the beginning of its conduction.

However, the third DR, that ought to have been conducted between September 2008 and October 2009,¹⁵⁵ but barely finished in 2010, had a list of positive changes. This review was initiated by the MDU and the GS and ought to be a basis for creating *The State Complex Program of Reformation and Development of the Armed Forces of*

¹⁵⁴ President of Ukraine, Decree of February 12, 2007, № 105/2007, *About National Security Strategy of Ukraine*. <http://zakon4.rada.gov.ua/laws/show/105/2007>.

¹⁵⁵ President of Ukraine, Decree of June 27, 2008, № 598/2008, *About Decision of the National Security and Defense Council of Ukraine on June 17, 2004 “About conduction of the defense review.”* <http://zakon4.rada.gov.ua/laws/show/598/2008>.

Ukraine Until 2017.¹⁵⁶ However, the DR came at a time of economic crisis and a worsening crisis in the development of the AFU. The first has greatly complicated the handling of the Ministry of Economy of Ukraine, and the MFU forecast indicators for funding the defense sector for the long term. This factor led to the breakdown of the timing of the review. Although the DR started opportunely, it didn't finish in an appropriate way. First the middle-term program¹⁵⁷ ended in 2011, but the successive program—*The State Complex Program of Reformation and Development of the Armed Forces of Ukraine Until 2017*¹⁵⁸—was approved just in 2013. However, in May 2014, this program has been suspended.¹⁵⁹ This DR differs from previous analogues because of the involvement of the non-governmental expert environment, such as the Razumkov Centre; the Centre military and security policy; the Center of research in the army, conversion and disarmament; and methodological assistance of foreign experts, in particular, the Geneva Centre for the democratic control of armed forces.

According to Korendovych,¹⁶⁰ who was at that time Director of the Department of Military Policy and Strategic Planning of the MDU, the most typical problems in solving the problems of the DR were as follows: (1) significant duration of DR; (2) lack of implementation discipline in realization of the organization-methodological recommendations, Plan of basis activities, and Plan-prospectus of draft of the SDB; (3)

¹⁵⁶ President of Ukraine, Decree of September 2, 2013, № 479/2013, *About Decision of the National Security and Defense Council of Ukraine on September 2, 2013 "About The State Complex Program of Reformation and Development of the Armed Forces of Ukraine Until 2017."* <http://zakon4.rada.gov.ua/laws/show/479/2013>.

¹⁵⁷ President of Ukraine, Decree of December 27, 2005, № 1862–25/2005 (restricted) *About Decision of the National Security and Defense Council of Ukraine on December 9, 2005 "About the State Program of Development the Armed Forces of Ukraine for 2006– 2011."*

¹⁵⁸ President of Ukraine, Decree of September 2, 2013, № 479/2013, *About Decision of the National Security and Defense Council of Ukraine on September 2, 2013 "About The State Complex Program of Reformation and Development of the Armed Forces of Ukraine Until 2017."* <http://zakon4.rada.gov.ua/laws/show/479/2013>.

¹⁵⁹ President Of Ukraine, Decree of May 13, 2014, № 468/2014, *About Decision of the National Security and Defense Council of Ukraine on April 28, 2014 "About Measures to Improve the Efficiency of Planning in the Sector of Security and Defense."* <http://zakon4.rada.gov.ua/laws/show/468/2014>.

¹⁶⁰ Korendovych V, "The Second Defense Review in Ukraine. Its Preliminary Results and Challenges," *Defense and Security Policy Center*, May 5, 2010. <http://defpol.org.ua/site/index.php/ru/arhiv/obonoglyad/1976-2010-05-05-10-52-47>.

the lack of trained personnel; (4) inferiority of the legislative acts and normative documents of the applied and planning procedures. He argues that:

The most characteristic and significant risks that affect the achievement of the specific objectives of the reforms in the sphere of national security and defense of Ukraine are as follows: ‘the human factor’ (the level of knowledge, experience, subjectivity); poor choice of ways to achieve its strategic goals, a fundamental change of goals in the phase of implementation; resources, especially financial; a widening gap between the theory and practice of operational art; the limited capacity of the national economy in the manufacture of modern AME for defense needs.¹⁶¹

He proposes the united scheme of defense planning (Figure 1) and claims that for the purpose of reducing the amount of time to conduct the DR, to make in advance “the evaluation procedures of the military-political situation, status, abilities/capabilities of the AFU, and the state’s capacity resources to meet the needs of defense.”¹⁶² He suggests reporting the results as separate documents.

¹⁶¹ Ibid.

¹⁶² Ibid.

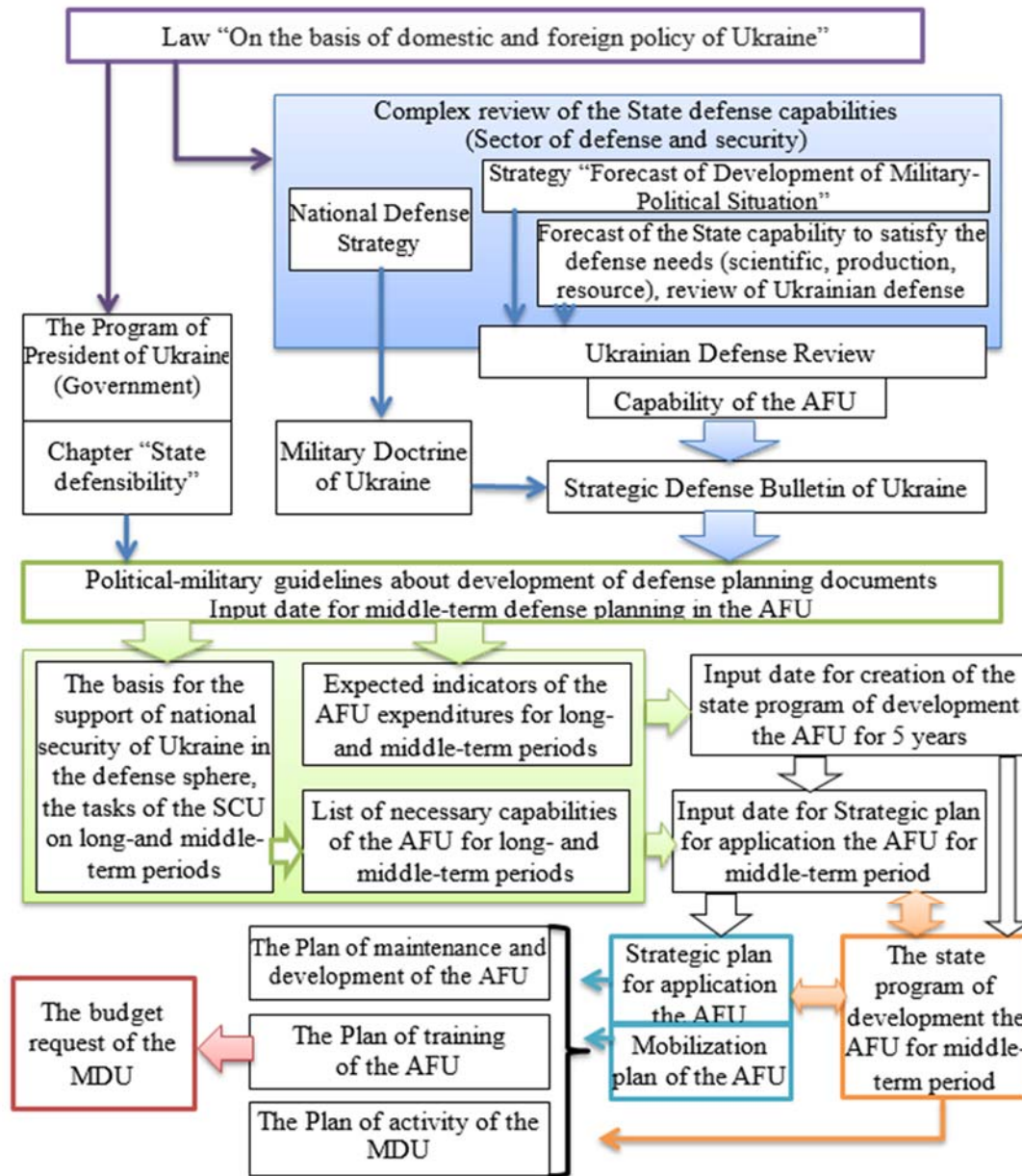


Figure 1. The United Scheme of Defense Planning¹⁶³

However, this scheme is cumbersome, demands a lot of time and personnel, and includes several middle-term documents that are inflexible and need continuous adjustments and amendments, but could be easily denied or replaced, as was mentioned

¹⁶³ V. Korendovych, "The Second Defense Review in Ukraine. Its Preliminary Results and Challenges," *Defense and Security Policy Center*, May 5, 2010. <http://defpol.org.ua/site/index.php/ru/arhiv/obonoglyad/1976-2010-05-05-10-52-47>.

in Chapter II. Finally, the most important point is responsibility. Unfortunately, responsibility has never been defined in an appropriate way, and nobody is willing to take responsibility for failing to fulfill the plan.

Moreover, according to the independent assessment of interim results, the methodology of the DR was judged to be broken. Thus, experts from the Razumkov Centre¹⁶⁴ revealed some shortcomings of this methodology that were due to the lack of effective strategic management at the state level, the incompleteness of the process of improving the organizational and functional structure of the MDU and the GS staff, not well developed (specific procedures) communication and coordination of activities involved in the review of ministries and agencies, and so forth:

1. ambiguity of the conceptual apparatus
2. uncertainty of the starting point of review
3. insufficient detail of total technology of review
4. failure to comply with the general rules of work with hierarchical structures
5. not enough clear definition of the algorithm forming scenario
6. imperfect methods of risk assessment
7. ambiguous approach to identifying the necessary resources
8. insufficient level of detail of interim results

Moreover, experts from the Razumkov Centre¹⁶⁵ argue that:

The assessment of prospects of development of the military-political situation in the world and around Ukraine for the period till 2025 were not quite complete and adequate;

The findings from the analysis of the military-political situation only partially and indirectly indicate potential sources of threats (what actually indicates the current situation in the Southwest region of Ukraine); and

¹⁶⁴ M. Sungurovskiy, "Policy defence is becoming more and more public: achievements and errors on the results of the independent review of the interim results of the defence review," on February 8, 2010. *Centre Military and Security Policy*, <http://defpol.org.ua/site/index.php/uk/arhiv/obonoglyad/927-2010-02-08-09-42-54>.

¹⁶⁵ Ibid.

The list of declared threats is very general, unstructured and does not provide technological relating to subsequent stages of formation scenarios and the identification of capabilities.

Finally, it is important to admit that both the SDBs have little information about the OMF, mostly through the absence of defense planning and its structures. Thus, the DR is almost based on the assessment of the AFU, and just partly on the OMF. The experience of the DR should be expanded into the entire security sector. This is essential to ensure binding strategic documents that formed the basis of the DR with budget development, adoption, and execution in the national security of Ukraine, and the direct impact of strategic documents on these processes.

D. RANGE OF PROBLEMS IN MDU RECOMMENDATIONS OF THE MOU ABOUT THE ORGANIZATION AND CONDUCT OF THE DEFENCE REVIEW

After three failed attempts at the DR in the MDU, the *Guidelines on the Organization and Conduct of the Defense Review*¹⁶⁶ were approved. These Guidelines establish the organizational and methodological basis for the preparation and conduction of the DR in the MDU, the GS, and the AFU. This is the first attempt to make the Guidelines, which defines purposes of the DR, stages, authorities, and support. However, the responsibility is missing here again. This section provides some critical points of these Guidelines.

The guidelines state the main purposes of the DR:¹⁶⁷ (1) assessment of the existing capacity of the state to respond to a wide range of modern challenges and threats in the military sphere, (2) definition of the development strategy of the Sector security and defense in the long term, (3) strategy harmonization with the available resources of the state, (4) determination of the principles of transformation of the AFU. However, the guidelines do not tie to other military organizations (they do not have even defense

¹⁶⁶ Minister of Defense of Ukraine. Order on May 13, 2013, № 303, “*Defense Review in the Armed Forces of Ukraine*.” <http://www.mil.gov.ua/diyalnist/reformi-ta-planuvannya-u-sferi-oboroni/provedennya-oboronogo-oglyadu-v-zbrojnih-silakh-ukraini/>.

¹⁶⁷ Ibid.

planning units) nor provide a guide for a one-sided DR. Unfortunately, the DR is carried out mostly manually and provides a view of existent authority.

The Expert Commission of the MDU¹⁶⁸ is the main collegiate body on the conduct of the DR, and it is at the head of the First Deputy Chief of Ministry of Defense.¹⁶⁹ The weakness here is that members of that Expert Commission are temporary. Thus, it is necessary to determine permanent members of the Commission. Those personnel should be chosen from experts who are competent and experienced in defense planning, finance, logistics, staffing, and personnel. It would be ideal if they passed some courses abroad, especially on defense planning, because such training would lead to a broader view on questions. Permanency is important because it provides responsibility for results.

There are three stages of the DR¹⁷⁰: organizational-preparatory, main (executive), and final. The shortcoming is the absence of even a rough timeline for this process. Two DRs in Ukraine lasted one and a half years. Thus, these DRs lost its urgency. For instance, when the first DR (2003 –2004) took the personnel and capability of thirty-two army corps (Crimea locus) into account, most units of the corps were reformed and relocated.

In the organizational-preparatory stage, the main goals¹⁷¹ are the forming of working bodies, defining their place on interagency and agency levels, and implementing activities of the DR. Thus, at this stage lies the fundamental causes of a superficial and biased DR. There is no clear definition of the officials responsible for the implementation of measures. Implementing temporary working groups requires training such groups, ensuring paperwork approval for questions that arise during working groups, organizing their interaction with other agencies, and defining responsibilities.

¹⁶⁸ Ibid. Article 3.1.

¹⁶⁹ Ibid.

¹⁷⁰ Ibid. Article 4.1.

¹⁷¹ Ibid. Article 4.2.

This stage in the first and the second DR was reduced to the carrying out of roundtables, presentations, seminars, lectures, and meetings. However, all these activities are only recorded, but not actually implemented. The majority of those designated generally did not understand what they needed to do. Everything came down to the regular division of the GS and services who performed the work and the approval and coordination of existing documents entrusted to time individuals who could not manage the situation. Thus, the results were just several advanced slogans.

In the MDU, a Project-Plan¹⁷² was drawn up for designing the SDB and approved by the Ministry of Defense of Ukraine. The Guidelines state an approximate section (subsection) of that Plan. However, it provides information just about the AFU, and initially does not contain any information and data about the OMF. Again the problem of interconnection arises.

The guidelines define four main procedures¹⁷³ of defense planning (figure 2): (1) assessment of security environment, (2) forces planning, (3) resource planning, (4) risk assessment.

Assessing the security environment includes the following¹⁷⁴: identifying prospects of development of military-political situation; specifying the list of challenges and threats in the defense sphere; forming on this list basis scenarios of hazards, where the AFU would be used as a component of the defense forces. However, only the AFU and no OMF is covered. This procedure includes the following tasks¹⁷⁵: assessing development prospects of military-political situation; identifying actual and potential risks and threats of a military nature; developing hazardous scenarios for Ukraine; and clarifying the likely scenarios and situations for planning of using the AFU, taking into account the escalation of risks and threats.

¹⁷² Ibid., Article 4.3.

¹⁷³ Ibid., Article 5.

¹⁷⁴ Ibid., Article 5.2.

¹⁷⁵ Ibid.

However, these activities should be done by using the IAS for a modeling situation (for instance, JWARS—Joint Warfare System) or IAS which can carry out a SWOT analysis (IAS “Resource”). This will allow for the consideration of all factors and realistically determining typical patterns which are necessary when performing tasks. Otherwise, the current situation in the Ukraine is a result of past mistakes in defining security threats: the main combat units were removed from the Crimea, and combat units in Donetsk and Lugansk regions were withdrawn and dissolved.

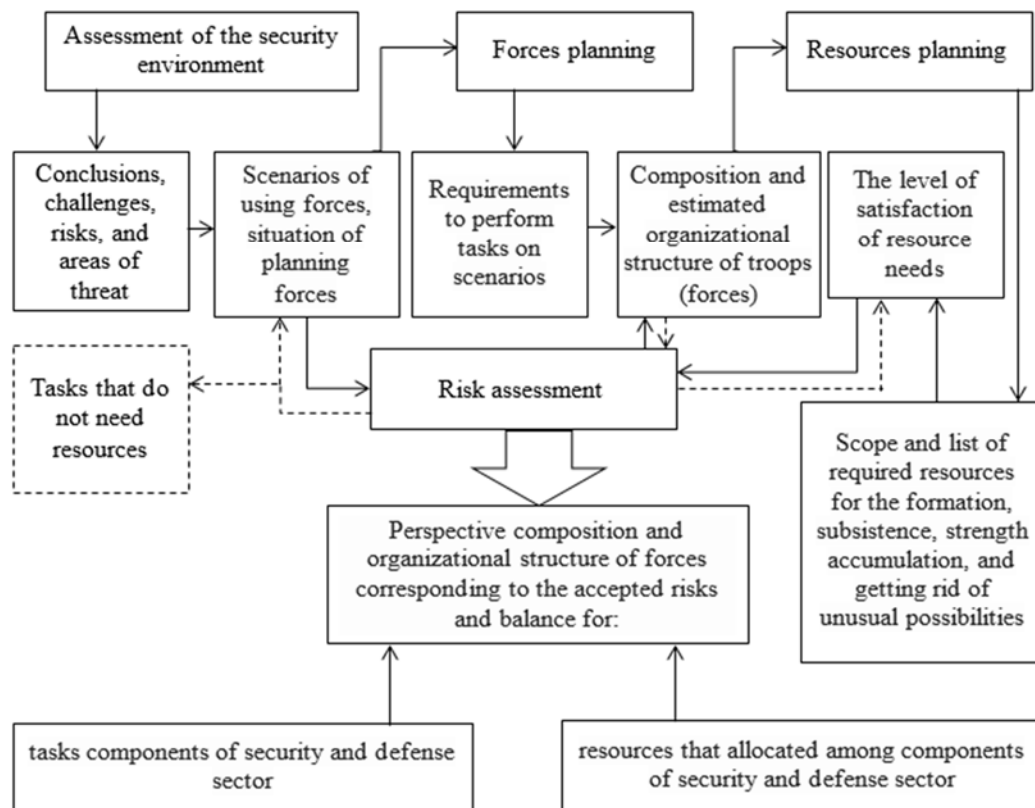


Figure 2. List and Reciprocal Relationships between Procedures in the Process of Task Execution of Defense Review (Option).¹⁷⁶

¹⁷⁶ Ibid., Article 5.

The procedure of forces planning¹⁷⁷ is based on the list of scenarios of defense forces and requirements of their operational (military) capabilities. This procedure includes an assessment of existing forces, a determination of whether their capacity requirements are up to the tasks of the new scenarios, and the difference between required and available capabilities. The basis for force planning uses a method based on capabilities. Unfortunately, the MDU and the GS do not have one clear and single definition of the term “capability.” “Capability,” “ability,” and “possibility” mean almost the same. Moreover, it is nonsense to use a capability-based method, instead of threat-based planning, especially when Ukraine currently has a real threat from Russia.

The next mistake into that procedure is typical patterns (units) at different levels, which are used for determination of the operational capabilities. These typical patterns are accounted with personnel for a special (war) period, so are fully equipped and provided as well. However, most of the military units have staff of peacetime, because the state does not have a special period¹⁷⁸ (full mobilization or war condition). A typical pattern is actually ideal, but very different from the real unit, because of personnel, equipment, readiness, and supply. Moreover, such planning is far from real structure, and does not take into account terms, and the amount of equipment which should be moved, effectively ignoring logistic problems. Thus, this is a strategic mistake to create any scenarios initially based on ideal conditions where it is taken into account that units are manned, fully equipped, ready and actually located in necessary positions.

The current system of resource planning¹⁷⁹ has a lot of shortcomings. First, in this case the resource is just money and nothing more. Second, determining the amount of money for providing defense needs considers the forecast of the gross domestic product (GDP) of the state, the annual inflation rate and the inflation of the price index, as well as the legislative and regulatory framework requirements for funding in a special period. However, the government usually provides forecasts during the autumn (Table 3 in

¹⁷⁷ Ibid. Article 5.3.

¹⁷⁸ Verkhovna Rada of Ukraine, Law of October 21, 1993, № 3543-XII, *About Mobilization Preparation and Mobilization*. <http://zakon4.rada.gov.ua/laws/show/3543-12>.

¹⁷⁹ Ibid. Article 5.4.

Chapter 1 provides some examples), so time is limited. Moreover, the Guidelines state¹⁸⁰ that the reliability of the forecast of defense expenditures is supplied by the scientific approach, using multiple information sources, both governmental and non-governmental analyses of independent experts. Thus, defense expenditures are defined not by the needs of the AFU, but by these independent experts. A rhetorical question arises: How much do non-governmental experts know about the credibility and reliability of the forecast of defense expenditures? And, does the MDU define a long-term forecast for defense expenditures and direct it to the MFU, but not get involved with the MFU's experts to calculate these figures? Finally, assessment of the current capabilities of its armed forces to perform tasks in all scenarios is to determine the degree of compliance and the difference between the required and available capabilities. The evaluation determined by the amount of resources needed for achieving the required capabilities (abilities) long term (five to ten years) are calculated as part of the life cycle (formation, support, capacity, deprivation) and the main categories of capabilities (see Figure 3). However, it is difficult to compare unequal parameters and indicators—typical patterns differ greatly from real units.

¹⁸⁰ Ibid.

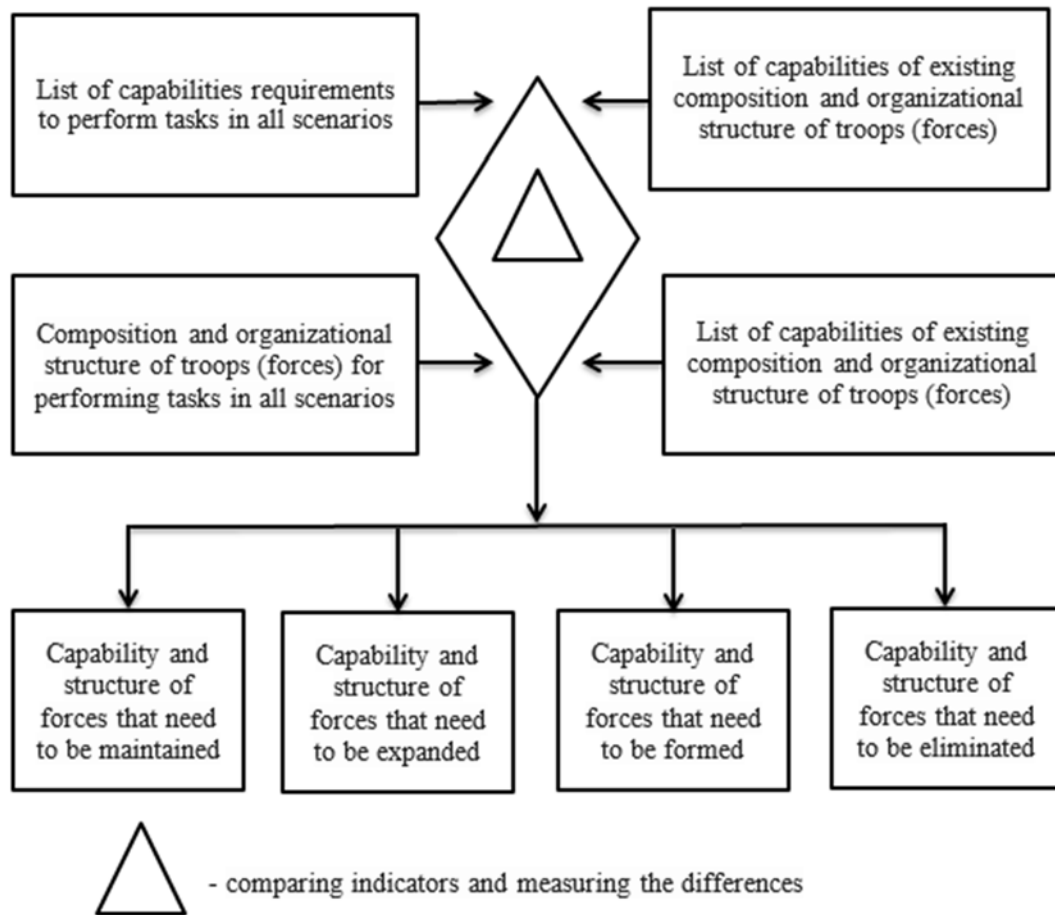


Figure 3. The Distribution of Capabilities Across Categories of the Life Cycle (option)

Risk assessment¹⁸¹ is a process of forming conclusions, preparing initial data, and supporting decision-making through the following: evaluating the tasks of the AFU in the context of expected challenges and threats to Ukraine in the long term; the capabilities which the AFU needs to reach, taking into account the existing situation and the capacity of the state to meet the needs of defense; the perspective model of the AFU and conceptual views on the strategy to achieve it; data sources for defense planning in the AFU, as part of the defense forces; the risks of achieving certain capabilities; and management in the process of achieving them. At this stage it is possible to draw faulty

¹⁸¹ Ibid. Article 5.5.

or weak conclusions, as it was previously. The DR should be practically money-driven, otherwise it is meaningless.

E. CONCLUSION

Chapter III discussed British and U.S. practices of conducting the DR, analyzed the flaws in conducting the DR in the MDU, and provided recommendations for the MDU in the organizing and conducting of the DR.

On the assumption of the previously-stated summary the DR could be defined successful if the result brought some effective changes in strategy, policy, and money. This chapter defined the main causes of the DR failure based on the best practices of conducting it, and described some critical moments in the United States' and the United Kingdom's experiences in conducting the DR. Unfortunately, even the best practice of the DR shows that it has almost never been successful. Something was always absent: the political will for changes, or the ability to change money (increase or decrease funding).

The DR is a necessary and important process for defense planning to conduct economic analyses and determine funding to meet strategic objectives. The current situation in Ukraine requires a qualitative transformation of the system of power relations at national, regional, and local levels. The need is not only to consolidate the achievements of Ukraine as a sovereign state, but also to continue developing its armed forces and conducting in-depth and effective reforms. That should be linked with budget capability to achieve specific priorities, not overblown ambitions.

IV. INTERDEPENDENCE OF BUDGET AND DEFENSE PLANNING

In generating a list of challenges facing the AFU, the economic capabilities of the state play a significant role, because the number of tasks is variable in the planning process, as is the process of direct activity of the AFU. The negative impact of economic factors reduces the number of possible tasks, which are reflected in defensive plans. This negatively affects the level of military security of the country. Rational allocation and efficient use of limited public resources to the needs of the AFU is one of the main tasks of defense planning. Therefore, financial and resource support of defense needs is the main factor that directly affects all planning and execution of tasks in the system of defense planning.

Short-term defense planning in the AFU is carried out cyclically and is consistent with the budget process in Ukraine. In recent years, defense planning documents have been widely used at all stages of budget planning in the MDU. Thus, the process allows reason to determine the financial needs of the AFU, more efficient allocation of financial resources according to needs, and so on. However, the MDU and the GS are not able to provide efficient defense planning, nor to properly prioritize and quickly respond to shift money or needs.

One of the main tasks of the MDU is to rationally allocate and efficiently use scarce state resources for the priorities of the AFU, especially in today's Ukraine. Although these tasks are clearly defined in the conceptual apparatus of legislation which governs the activities of the MDU in defense and budget planning, unfortunately, they were built on old Communist legacy concepts, and therefore predictably fail. As a result, when defense expenditures represent allocation among categories Personal and Maintenance, Training, and Investment, category Personal and Maintenance includes 70–90%. However, this number is too large because of the inappropriate allocation of subcategories. An idealized system should have one third for each of these three categories.

Thus, the interdependence of budget and defense planning require separate treatment, but this chapter discusses three issues that touch upon defense planning: how budget and defense programs exist together, how to plan and execute financial resources for the MDU, and how special fund challenges defense planning.

A. BUDGET AND DEFENSE PROGRAMS

Implementing the system of defense planning of the AFU has become a transitional stage from the planning system “tools—measures—result of using funds” to “measures—funds—the result of implementing of measures and using funds.” In addition, there is a need to classify the expenditures of the AFU by categories: personnel, maintenance, training, and investment in the development of military armament and equipment and infrastructure. This is quite difficult to do using existing budget classifications. According to the *About Budget Classification*,¹⁸² the budget of the MDU is divided into budget programs, which includes codes of economical classification of expenditures (CECE).¹⁸³ However, publically available information about the annual law *About the State Budget of Ukraine* is scarce. For instance, according to Annex 3 of *About the State Budget of Ukraine for 2014*,¹⁸⁴ the budget of the MDU represents seven budget programs. Table 2 is an example of expenditures in the general fund (the special fund has the same indicators and distribution). Thus, expenditures are divided into consumption and development, and two areas—salary (without tax charges), and utilities and energy—are selected from the consumption expenditures. The budget of the MDU is absolutely non-detailed for public access. Table 2 shows that just names of budget programs and total sums of expenditures are published. The limited information inside of budget programs is available only for some agencies related to defense sphere. However, even the unrestricted information of these budget programs is not detailed, because defense

¹⁸² Ministry of Finance of Ukraine. Order on January 14, 2011, № 11. *About Budget Classification*. http://www.minfin.gov.ua/control/uk/publish/article%3Fart_id=356065&cat_id=355990.

¹⁸³ Ibid.

¹⁸⁴ Verchovna Rada of Ukraine. Law on January 16, 2014, № 719-VII. *About the State Budget of Ukraine for 2014*. <http://zakon4.rada.gov.ua/laws/show/719-18>.

expenditures inside are divided by the CECE and shows only the total sum of expenditure by these CECE.

Table 2. Distribution of Expenditure of General Funds of the State Budget of Ukraine for 2014 for MDU, Thousand Hryvna

Name of budget programs	General Fund				
	Total	The consumption expenditures	Of them		The development expenditures
			Salary	Utilities and energy	
The MDU, of them:	13,677,465.7	12,459,018.5	7,495,064.6	1,232,852.8	1,218,447.2
Authority of the AFU	225,077.9	225,077.9	164,003.3	4,145.9	
Support of the AFU and training of troops	11,319,392.7	10,746,732.6	6,298,621.3	1,213,716.8	572,660.1
Medical treatment, rehabilitation and health provisions for the personnel of AFU, veterans of military service and family members	685,797.4	685,797.4	427,622.0	14,990.1	
The training of military specialists in higher education institutions of I-IV levels of accreditation, professional development and retraining of military personnel and civil servants, initial military training of youth	795,704.1	795,704.1	604,818.0		
Development of armament and military equipment of the AFU	556,816.3				556,816.3
Building (purchase) accommodation for military personnel of the AFU					
Disposal of ammunition and liquid propellants, ensuring survivability and fire/explosion safety of arsenals, bases and depots of the AFU	94,677.3	5,706.5			88,970.8

Therefore, indicators and measures of the directions of development (reformation)¹⁸⁵ provide an opportunity to plan and track measures of development (reformation), detailing the prospective areas of the mid-term defense programs. These indicators and measures actually are the input data to determine financing, resource provisions, and the timing of the execution of defense programs, as reflected in the documents of military planning. Thus, the directions of development (reformation), which are defined as the financial and economic calculations in the state defense programs, as into the PMD, are allocated to the cluster (sub-cluster). Figure 4 provides some example of the cluster (sub-cluster).

These clusters allow more accurate categorization of expenses for maintenance, training, and equipment. Unfortunately, the PMD and such detailed calculations are restricted for public access. This is opacity corruption, especially in the acquisition process. The amount of corruption in acquisition is currently opened when volunteers are involved in the logistics process in the MDU and the GS. The use of clusters allow the PMD to be transformed into budget programs, but almost not vice versa (see Figure 4). Figure 4 shows that almost 80% of the areas of expenditures are gathered into one budget program: “Support of the AFU and training of troops.” All these aspects confirm the need for further improvement of the system of defense planning, which would be united in the opinion of its organization and implementation, and coordination with budget planning.

¹⁸⁵ Ministry of Defense of Ukraine, Order on January 19, 2010. № 15, *About Approval of the Regulation About the Organization and Implementation of Middle-Term and Short-Term Defense Planning in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine.*

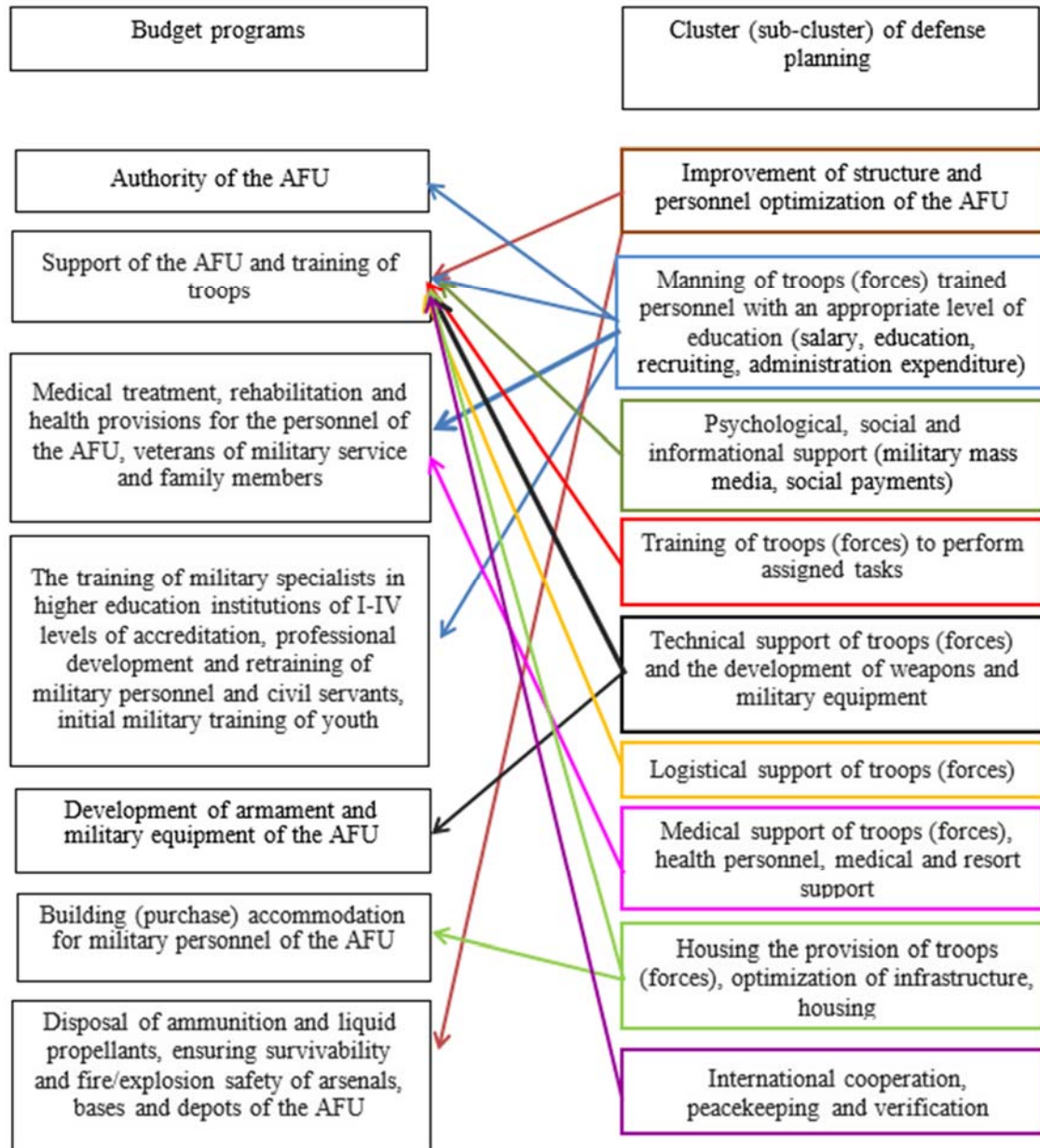


Figure 4. Connection Between Clusters (Sub-Clusters¹⁸⁶) of Defense Planning to Budget Programs

¹⁸⁶ Sub-cluster will be open just to clarify necessary information. Full classification is in the Order of Ministry of Defense of Ukraine, Order on January 19, 2010. № 15, *About Approval of the Regulation About the Organization and Implementation of Middle-Term and Short-Term Defense Planning in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine.*

B. ANALYSIS OF PLANNING AND EXECUTING FINANCIAL RESOURCES OF MDU

According to Asset 2 of the law *About the Defense of Ukraine*,¹⁸⁷ the financing needs for defense are carried out exclusively through the state budget. Defense expenditures must meet the real needs of defense and be not less than 3% of the expected GDP. However, the defense budget does not completely belong to the AFU. Only about 2.75% does. Moreover, exactly 2% of GDP was dedicated to the needs of the MDU in the Decree of the president of Ukraine,¹⁸⁸ which adopted *The State Program of Development of Armed Forces of Ukraine 2006–2011*. Besides, as Figure 5 shows, since 1993 it has never happened, and the mean value for 1992–2013 is about 1.38% of the GDP. Therefore, the chronic underfunding of defense requests leads to a permanent accumulation of problems in the development of the system of military security of the state, as well as the technical outmodedness the AFU. Thus, the main task for managers of budget program is to manage scarce expenditures for discrete expenditures¹⁸⁹ (salary, medical support, food, utilities, education and so on). Figure 6 shows the evolution of defense spending categories: Maintenance, Training, and Investment. Maintenance areas include direct and indirect personal expenditures; about 85–90% of Training includes fuel costs; and Investments include costs for AME procurement, research and development (R&D), and infrastructure.

¹⁸⁷ Verkhovna Rada of Ukraine of Ukraine. Law of December 6, 1991, no. 1932-XII, *About the Defense of Ukraine*. <http://zakon4.rada.gov.ua/laws/show/1932-12>.

¹⁸⁸ The President of Ukraine. Decree of December 27, 2005, no. 1862–25/2005. *About Decision of the National Security and Defense Council of Ukraine from 9th of December 2005 “About the State Program of Development of Armed Forces of Ukraine 2006–2011.”*

¹⁸⁹ Verkhovna Rada of Ukraine of Ukraine. Law, Code of Ukraine of June 8, 2010 no.2456-VI *Budget Code of Ukraine*. <http://zakon4.rada.gov.ua/laws/show/2456-17>, art 55.

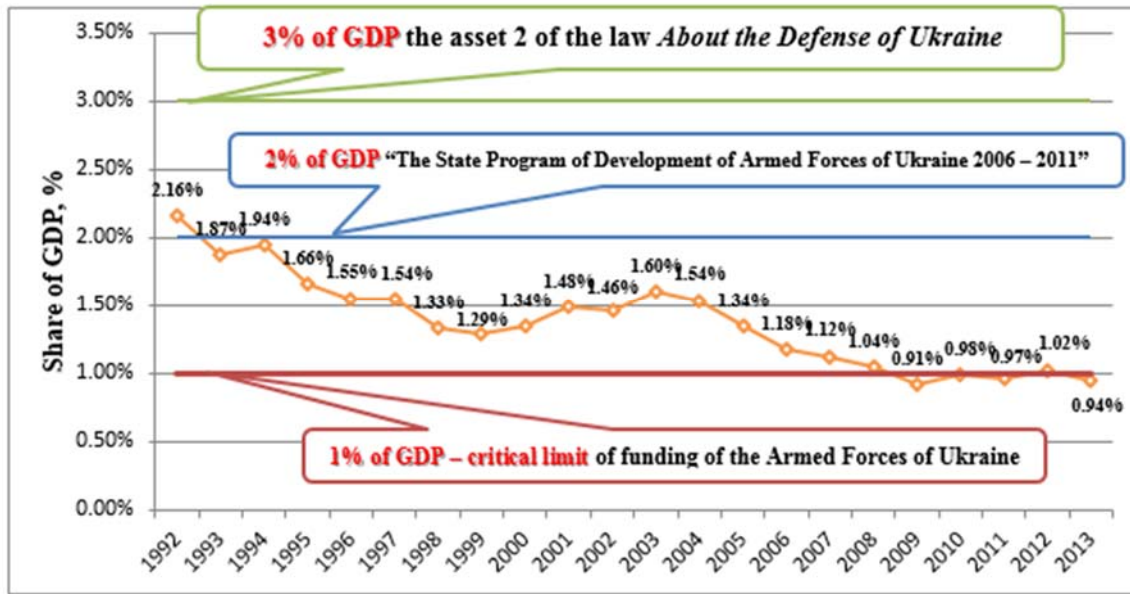


Figure 5. Share the Defense Budget of GDP 1992–2013¹⁹⁰

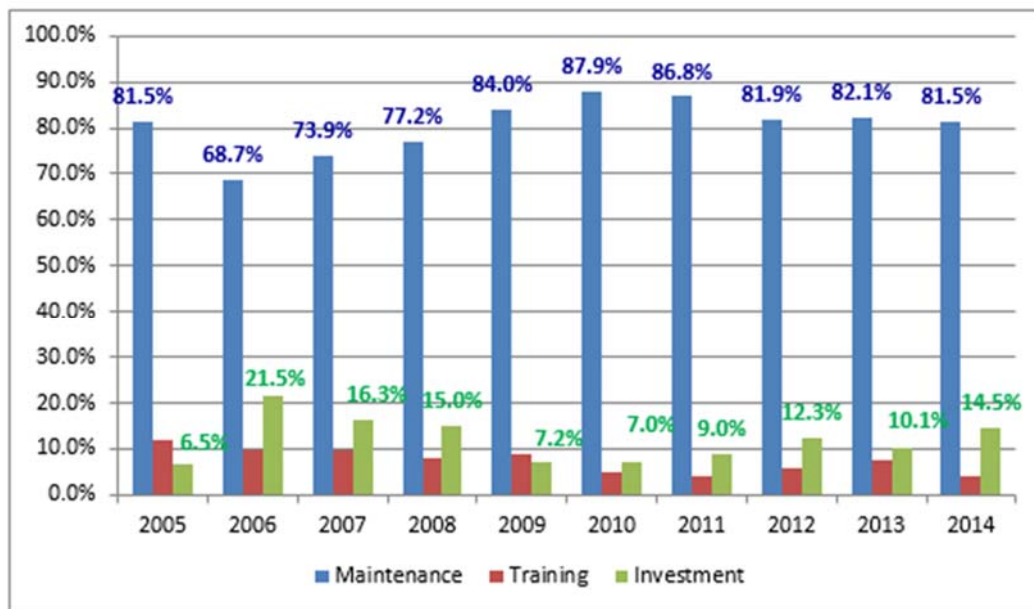


Figure 6. Defense Spending Category 2005–2014¹⁹¹

¹⁹⁰ Analytical dates about budget of Ministry of Defense of Ukraine for 1993–2011 can be found at <http://zakon2.rada.gov.ua/laws>, and statistic dates about Ukrainian GDP can be found at <http://www.ukrstat.gov.ua/>.

Figure 7 shows the average allocation for these categories. Thus, the Subsistence area has about 80% of total expenditures.

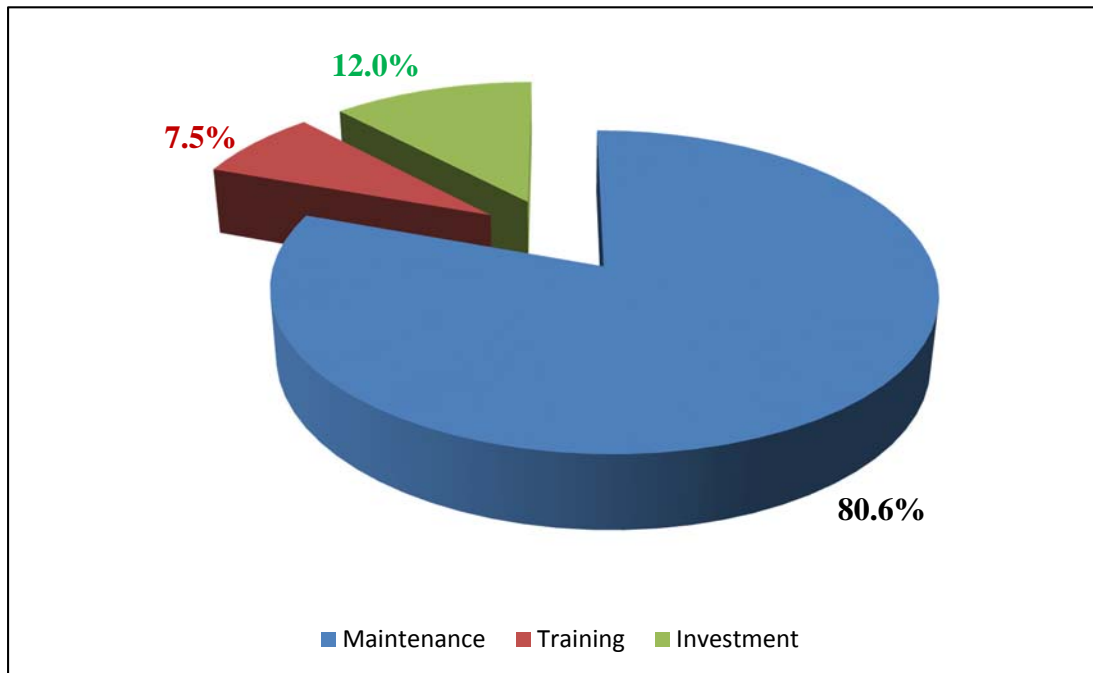


Figure 7. Average Defense Spending Category 2005–2014.¹⁹²

Figure 8 shows the dynamics of changing defense expenditures and the GDP from 2000 –2013. Indicators of defense expenditures demonstrate the annual reduction subject to Ukraine’s GDP growth.

¹⁹¹ Analytical data about defense spending category 2011 can be found at White Book 2005–2013 and the database of MDU <http://www.mil.gov.ua/diyalnist/byudzheta-vikonannya-czilovix-program/vikonannya-ministerstvom-oboroni-ukraini-derzhavnogo-byudzhetu/vikonannya-ministerstvom-oboroni-ukraini-derzhavnogo-byudzhetu-na-2014-rik.html>.

¹⁹² Ibid.

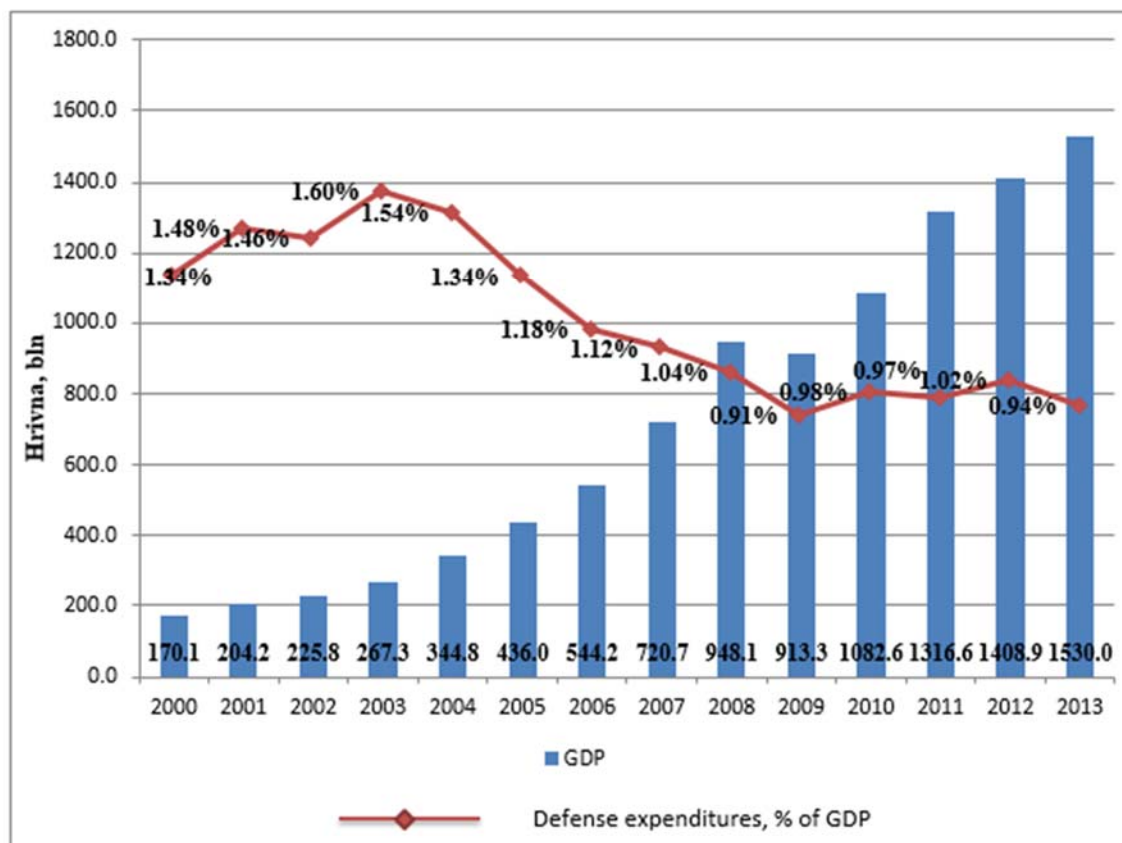


Figure 8. Dynamic of Changing of Defense Expenditure and GDP 2000–2013¹⁹³

However, based on the SIPRI database,¹⁹⁴ Figure 9 represents defense expenditures of Ukraine significantly different from Figure 8. The reason is that SIPRI's data includes not just expenditures of the AFU, but of the Pension Funds and the intelligence service.

¹⁹³ Analytical dates about budget of Ministry of Defense of Ukraine for 1993–2011 can be found at <http://zakon2.rada.gov.ua/laws>, and statistic dates about Ukrainian GDP can be found at <http://www.ukrstat.gov.ua/>.

¹⁹⁴ Stockholm International Peace Research Institute. *SIPRI Yearbook: World Armaments and Disarmament* (Stockholm : New York: Almquist & Wiksell, 1997–2013). <http://www.sipri.org/yearbook>.

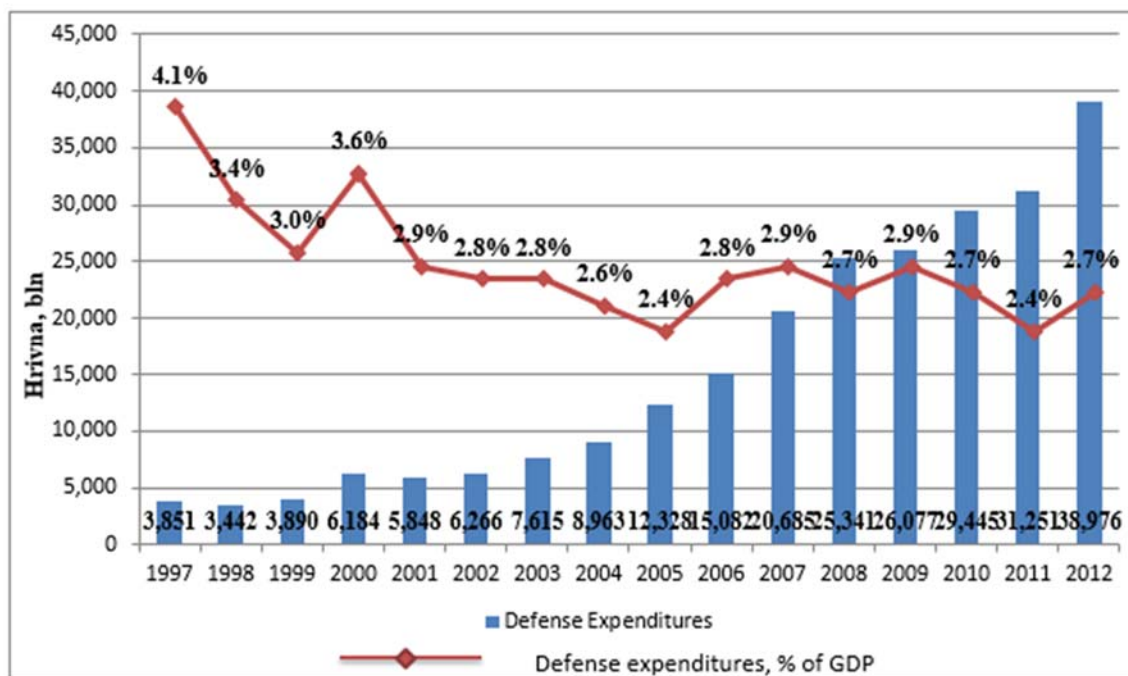


Figure 9. Defense Expenditure 1997–2012¹⁹⁵

According to the Constitution of Ukraine¹⁹⁶ and the law *About the Organization of Defense Planning*, budget requests and proposals to the draft of the state budget of Ukraine for next year are developed by the MDU. The CMU reviews and refines these proposals and includes them in the draft of law, *About the State Budget of Ukraine*, in the structure of the defense budget. Further, the NSCDU coordinates the draft, then submits proposals to the president of Ukraine concerning financial provisions for implementing measures in the defense area. The VRU considers the amended draft of the law *About the State Budget of Ukraine*, amends, and approves it. In other words, the amount of financial support for certain defense programs depends on the decisions of the VRU.

Thereby, if the state, for whatever reasons, may not fully address the current funding activities of certain projects, the same Law provides its correction due to changes in short-term defense planning. There is a striking contradiction. On one side, the CMU

¹⁹⁵ Stockholm International Peace Research Institute. *SIPRI Yearbook: World Armaments and Disarmament* (Stockholm : New York: Almquist & Wiksell, 1997–2013). <http://www.sipri.org/yearbook>.

¹⁹⁶ Verkhovna Rada of Ukraine. Law of June 28, 1996, № 254k/96-BP, *Constitution of Ukraine*, <http://zakon4.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80>.

agrees on a program of development for the AFU. That means that its financial needs are compared with the capabilities of the economy, and the CMU recognizes the state's ability to satisfy them. However, the VRU approved significantly less financial support for the armed forces needs that were approved by the CMU. Thus, the executive and legislative branches of the government are not consistent in financing the military sphere.

Figure 10 shows the analysis of the effectiveness of planning and executing the financial resources of the MDU. Thus, the red plot is data of *The State Program of Development of Armed Forces of Ukraine 2006–2011*¹⁹⁷; the purple one is *About The State Complex Program of Reformation and Development of the Armed Forces of Ukraine Until 2017*¹⁹⁸; and the green one represents defense expenditures, approved by the CMU.¹⁹⁹ The blue one represents real expenditures.²⁰⁰

Thus, expected expenditures significantly exceed real. These expenditures demonstrate that certain plans and projects have not been completed or have been postponed for an unknown period of time. Thereby, it was impossible to complete any strategic plan since the intermediate tasks could be completed or postponed. Thus, the whole pattern of planning cycle collapses due to such expenditures gaps.

¹⁹⁷ President of Ukraine. Decree of December 27, 2005, № 1862–25/2005 (restricted) *About Decision of the National Security and Defense Council of Ukraine on December 9, 2005 “About the State Program of Development the Armed Forces of Ukraine for 2006–2011.”*

¹⁹⁸ President of Ukraine. Decree of September 2, 2013, № 479/2013, *About Decision of the National Security and Defense Council of Ukraine on September 2, 2013 “About the State Complex Program of Reformation and Development of the Armed Forces of Ukraine Until 2017.”*
<http://zakon4.rada.gov.ua/laws/show/479/2013>.

¹⁹⁹ Cabinet Ministry of Ukraine. Decree on July 7, 2010, № 568, *About the approval of the forecast expenditures from the general fund of the state budget for the needs of defense up to 2023.*
<http://zakon4.rada.gov.ua/laws/show/568-2010-%D0%BF> and data from Table 2.

²⁰⁰ Analytical dates about budget of Ministry of Defense of Ukraine for 2006– 2013 can be found at <http://www.mil.gov.ua/diyalnist/byudzheta-vikonannya-czilovix-program/vikonannya-ministerstvom-oboroni-ukraini-derzhavnogo-byudzhetu/>.

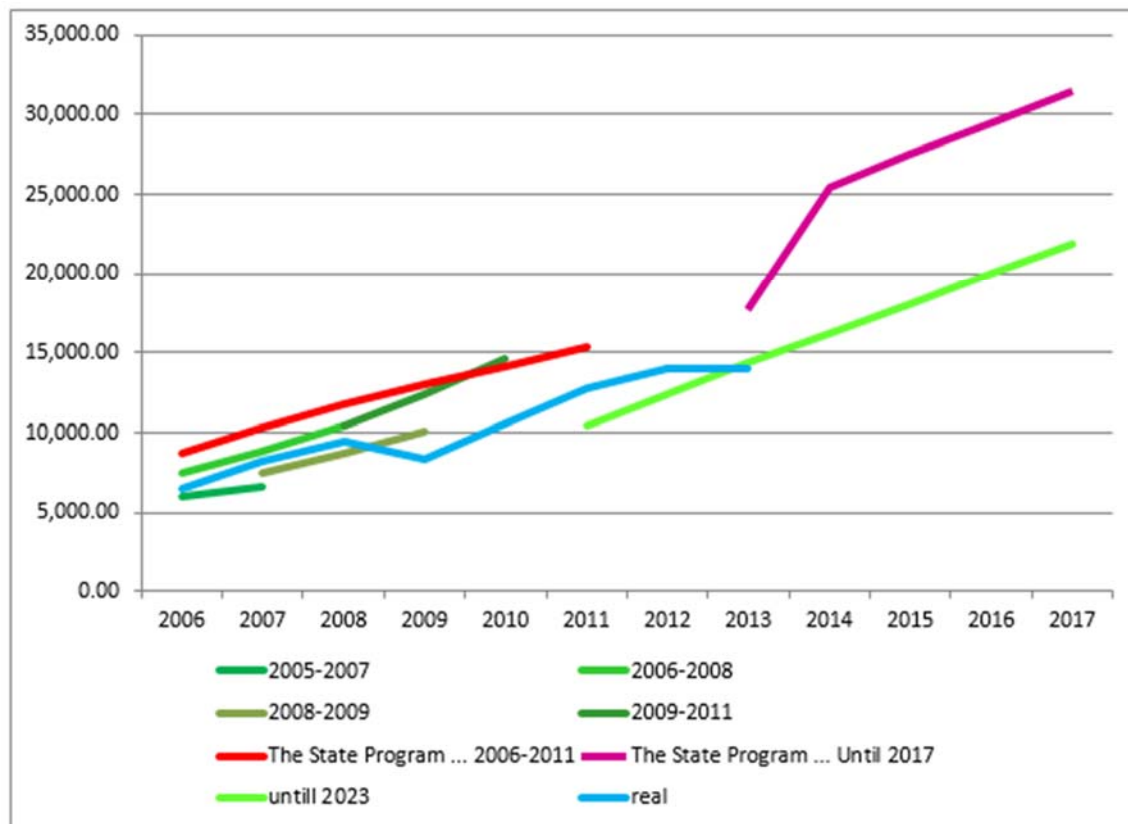


Figure 10. Defense Expenditures 2006–2017

C. SPECIAL FUND—UNCERTAINTY OF DEFENSE PLANNING

In accordance with the budget code, the Budget consists of general and special funds.²⁰¹ The special fund has always attracted attention for its specificity. This fund contains revenues for a specific purpose and its distribution by CECE²⁰² to implements the corresponding expenditure in accordance with the legislation and priority activities related to the MDU.

After the collapse of the Soviet Union, legacy funding in many cases did not meet the needs of Ukraine's army. Defense resources (surplus ammunition, cumbersome system of military education, facilities provided for the use of nuclear weapons, and so

²⁰¹ Verkhovna Rada of Ukraine, the Law of July 8, 2010, № 2456-VI, article 13, *Budget Code of Ukraine*. <http://zakon4.rada.gov.ua/laws/show/2456-17>.

²⁰² Ministry of Finance of Ukraine. Order on January 14, 2011, № 11. About Budget Classification. http://www.minfin.gov.ua/control/uk/publish/article%3Fart_id=356065&cat_id=355990.

on) were useless or unnecessary. Thus, reducing (redundant) immovable and movable property could be an additional resource for defense reforms if it is a profitable realization. The question arose as to who should be engaged in the marketing of surplus military property: special state agencies or the MDU? The result was that the MDU should fill part of the annual budget, adding to its special fund for the implementation unusual for the AFU commercial functions (Figure 11). However, replenishing the special fund requires certain commanders (chiefs) to pay considerable attention to commercial activities of their military units. This does not meet the purpose of these military units, and engenders corruption. Under the guise of economic activity, some commanders solve personal problems at the expense of available military resources. In addition, some commanders are illicitly using the lookup infrastructure.

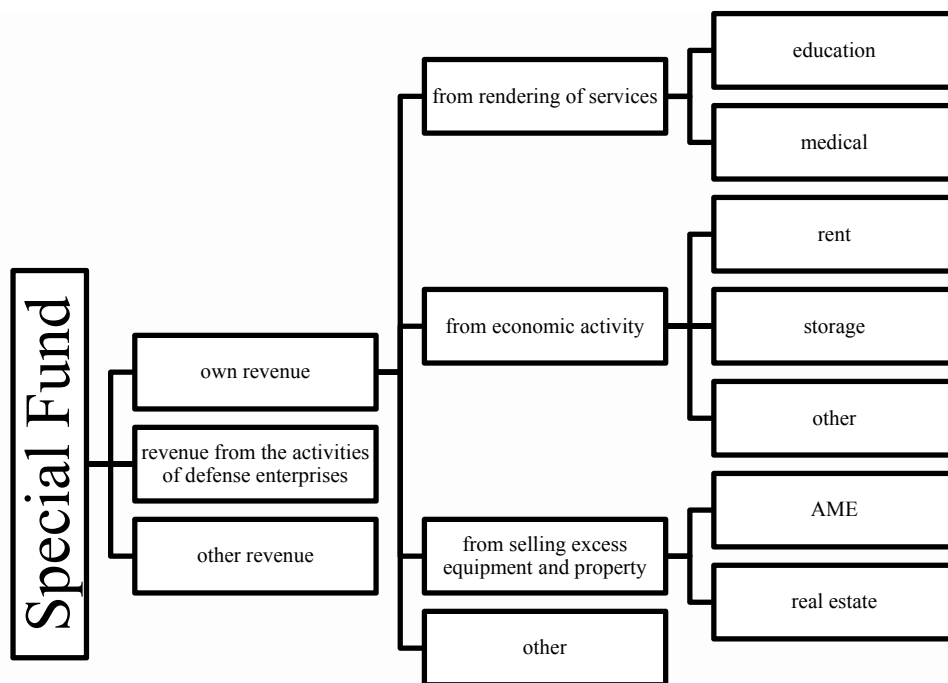


Figure 11. Structure of Special Fund of the MDU

The MDU is entitled to incur expenditures within the limits of and for the account of the relevant receipts to the special fund, and to estimate its own revenues without making corresponding amendments to the law *About the State Budget of Ukraine*. Thus, indexing the special fund of the State budget and executing it not actually controlled by

the VRU or the CMU. This explains to some extent the shortfall in the revenues of the special fund. Moreover, because of complex approval procedures of selling AME and military facilities across the State Property Fund of Ukraine, it is difficult to execute receiving revenue for the special fund due to auction sale of military properties or equipment. Figure 12 shows the appropriation and execution of special funds in the budget of the MDU during 2005–2013 (according to appropriations). In 2005 alone the amount of the approved special fund was executed, in 2008 (62.5%) and 2013 (87.7%) the special fund received more or less appropriate revenue (Figure 13). Thus, due to inefficiency of economic activity, problems in control of military property, and corruption, filling the special fund most years received less than half of its planned volume.

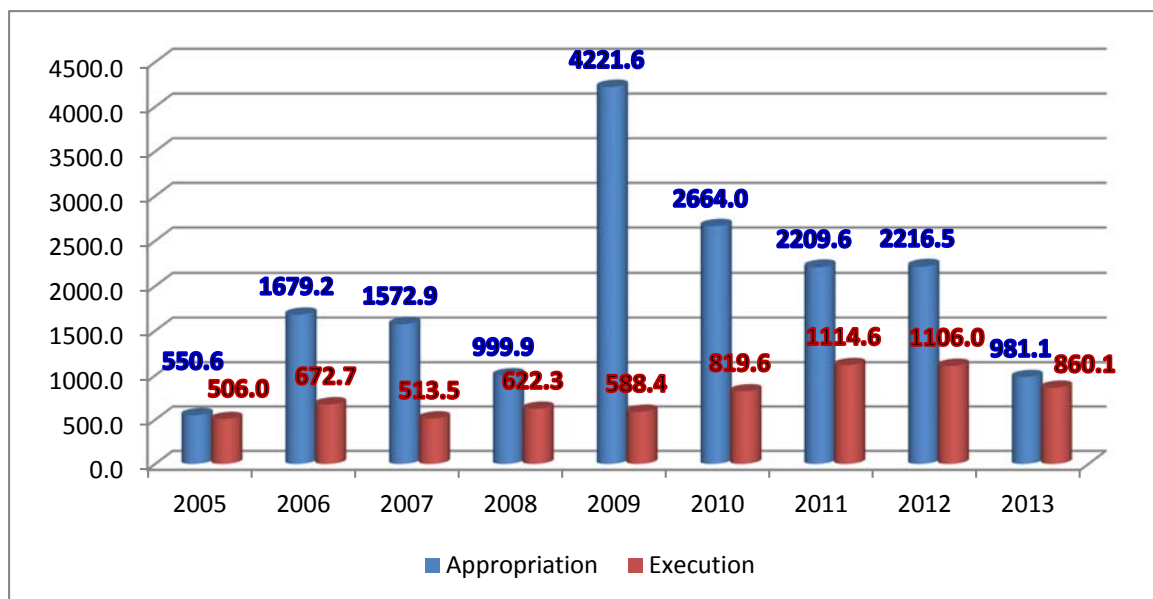


Figure 12. Appropriation and Execution Distribution of Special Fund of Budget of the MDU During 2005–2013²⁰³

²⁰³ *White books 2005–2014.*

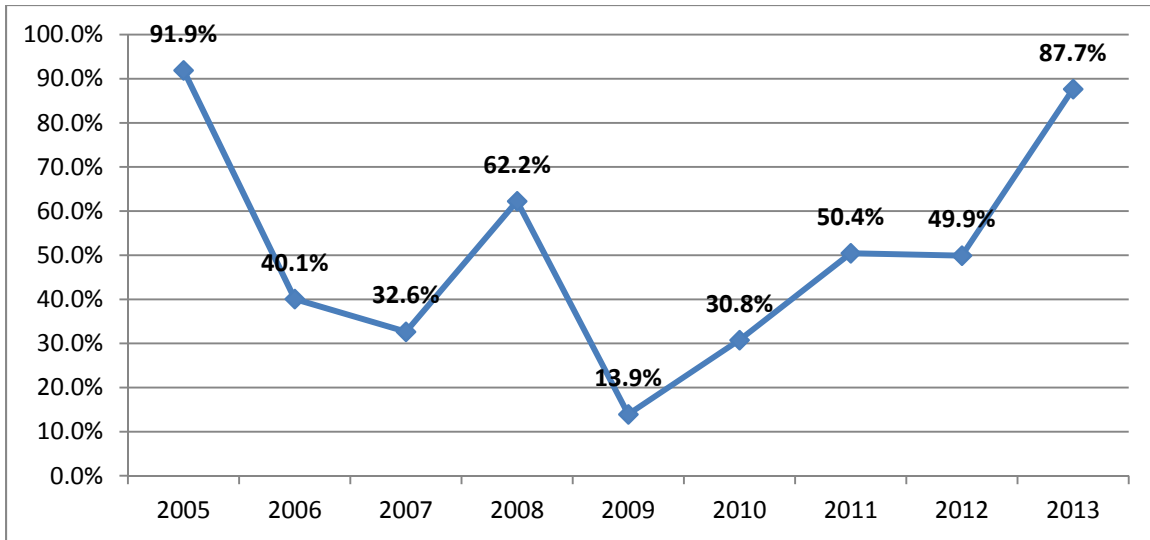


Figure 13. Rate of Execution of Special Funds of MDU Budget During 2005–2013²⁰⁴

However, the plan for the special fund is still complete, including long-term plans, which are practically impossible. Activities which are funded from the special fund depend on the timing and amount of received revenue. This creates a problem in executing these activities. Thus, about half of the planned activities will not be executed through the risk of the special fund.

D. CONCLUSION

This chapter shows that the main weakness of planning is confusing and non-detailed. The defense programs are detailed enough, but classified; whereas the budget programs are open but non-transparent. The MDU used to claim and accuse the MFU of failing to provide financial resources for the AFU. Thus, managers should be able to manage their existing resources efficiently. Moreover, the biggest problem is leadership misunderstanding the necessity of planning for what they have, not what they want to have. Otherwise the mistakes of the last decade will be repeated. Finally, the MDU should eliminate the special fund. As a last resort, the special fund could be retained just for medicine and education only.

²⁰⁴ Ibid.

V. ATTEMPT TO ACHIEVE FORCE MANAGEMENT

Currently, automated control systems at the operational-strategic level and compatibility with automated control of the military authorities at the tactical level are extremely important for successfully commanding forces. Currently, the need to improve management effectiveness of the AFU creates the Unified Information-Analytical System of the Armed Forces of Ukraine and its elements. The IAS “Resource” is an existing software system which was initially created for defense planning support, but unfortunately cannot sustain the decision-making process. This section discusses the evolution of the IAS “Resource,” causes of its failure, and proposals of further it existing.

Since the creation of the AFU, the creation of a unified management system has been given significant consideration. Actually, since 1992, research institutes of the AFU, academic and research institutions of the National Academy of Science of Ukraine, and industry have carried out more than 100 studies and more than 40 engineering designs in this area.²⁰⁵ However, “only about 20% of these work have reached the stage of prototyping, trials, and testing, and about 80% of them have not been accepted, and were therefore, suspended at various stages of execution of work: conceptual and technical design (40%), development of design documentation (40%).”²⁰⁶

Moreover, much of the information-analytical systems (IAS) of accounting, accounting data, and databases have been established for more than 20 years of the AFU. In other military formations of Ukraine, significant numbers of IAS were created as well, in various forms. Thus, all agencies involved in defense and national security tried to create their own IAS. Unfortunately, it did not succeed in either the AFU or other formations. Today, each agency uses its own IAS, most of which are closed (restricted) and have limited access both within the agency and between them. Thus, different IASs are involved in defense and national security, such as accounting, personnel, mobilization, and the management of vehicles, armament, and other military equipment.

²⁰⁵ Pastuhov O., “The ACS of Armed Forces of Ukraine,” *Ukrainian Military Portal*, March 20, 2012, <http://mil.in.ua/news/206-old-news/2010-08-03-15-32-54/4374-2012-03-20-20-26-22>.

²⁰⁶ Ibid.

However, no one analytical system can unite all systems and allow communication of data across databases. This is a critical need in Ukraine. In 2014–2015, four waves of mobilization were declared. All agencies and structural units spent a lot of time coordinating surveys of military personnel, vehicles, equipment, industrial capability, and so on, in one or another agencies covered by the full database. Moreover, different IASs within the MDU demanded additional staff for setting up and maintaining these systems, which require proper education and training (often this is an extra cost, because almost all software is developed and maintained by private firms). However, IASs are affiliated neither with the other agencies nor even among themselves (for example: IAS “Mobilization training,” IAS “Personnel accounting,” IAS “Transport accounting”). Additionally, most IASs were created only for WinXP or Win2000 and only a few can be converted to latest operating systems Win7, 8, or 10, or other operating systems like Linux.

Since 2000, the state could not maintain a huge inventory of equipment and weapons. This was needed to make fundamental decisions regarding the reform of the country and the Army in conditions of limited and insufficient funding. At that time, the country had not yet decided its direction. The majority of authorities of the state and the MDU cautioned against the introduction of a system of defense planning and was even hostile to the introduction of this idea. Shelest²⁰⁷ can be considered the founder of defense planning in the AFU. He led the AFU since the birth of defense planning structures, the introduction of the IAS “Resource,” and approved the law *About the Organization of Defense Planning*.²⁰⁸ However, this was an incorrect understanding; it was not actually planning, but force management.

The IAS “Resource” was created as an IAS in support of defense planning, but there has never been software for it. Shelest, the conceptualizer of the IAS “Resource,” felt that this system would support defense planning. However, it was just a force

²⁰⁷ “Defense and Security Policy Center.” <http://defpol.org.ua/site/index.php/ru/our-team>.

²⁰⁸ Verkhovna Rada of Ukraine. Law of November 18, 2004, № 2198-IV, *About the Organization of Defense Planning*. <http://zakon4.rada.gov.ua/laws/show/2198-15>.

management tool, but fell into decay under poor management and improper use. Thus, the future of this system is rather questionable.

A. ESSENCE OF THE IAS “RESOURCE”

Shelest guided the legislative acts, regulations, and target programs, created patterns for processing and summarizing data, and established appropriate structural units into the GS and the MDU. Also, appropriate units were created in services of the AFU and the operational commands with certain powers and structure. Military units had separate staff officers. Such officers' responsibility was to collect and process information, develop relevant reports of force management, and provide primary data (fill template of units) for the IAS “Resource.” However, his achievement failed because it used the Soviet approach.

While preparing for a DR in 2003, an analysis of existing software tools for collecting and processing data indicated the impossibility of its implementation for defense planning in Ukraine. Thus, the creation of the IAS “Resource” began in 2003. At that time, it was the advanced information system. This system creates a database that contains information about the condition and value of maintaining each military unit, analyzes the current conditions of the AFU, and identifies quantitative and qualitative indicators. All databases were concentrated in the IPCDP. For 2004–2011, the IPCDP worked in two main directions:

- (1) Remaining in working condition IAS “Resource,” accumulation and creation a database on item (nomenclature), the amendments of software and technological support for the work of the IAS in the units are the main tasks.
- (2) Collection and preliminary analysis of received information, providing decision-making about the results of the IAS “Resource” working, accounting of weapons and military equipment, conditions, capacity, and capabilities of military units, and capabilities to carry out combat tasks, and tasks in the interests of the protection of civil and territorial defense in their (units) respective regions. But this collection was not consistent with the terms of other documents (annual financial accounting and preparation of annual training plan (training, operation)) and usually prepared earlier. Thus, it is not allowed to fully enter the appropriate data in the needs for the next year and as a conclusion had been perfunctory and false indicators of needs and appropriate solutions usually been wrong.

The main purpose of the IAS “Resource” is to substantiate, model, and forecast defense expenditures. For instance, it includes such tools as: (1) information modeling of perspective structure of the AFU, (2) resource support of substantiation of annual events in the reform of the AFU, (3) the distribution of expenditures of the state budget of Ukraine for the needs of the AFU. Table 4 represents software complexes of the IAS “Resource.”

There are three functional subsystems in the IAS “Resource” (Figure 14):

- (1) Accounting of Defense Resources and Monitoring Their Condition is for “collection, accumulation, and preservation of factual and normative data about the provision of military units, their costs, and low-key review these data.”²⁰⁹
- (2) Structure Modeling of Defense Resources and Definition of Defense Expenditures “forms expected composition of military formation, their structure, plans of reformation of the AFU, calculates costs for their maintenance and carrying out reformation.”²¹⁰
- (3) Formation of Proposals for the Budget of the MDU “defines financial resources for the development and reformation of the AFU according to codes of program classification of expenditures, creates proposals for budget requests of the MDU, and allocates defense expenditures subject to needs and defined priorities.”²¹¹

²⁰⁹ Shelest Y, “‘Resource’ – the Information-Analytical System for Support to the Defense Planning,” *Science and Defense*, no 3 (2005), 21. <http://www.nio.mil.gov.ua/pdf/2005-3.pdf>.

²¹⁰ Ibid.

²¹¹ Ibid.

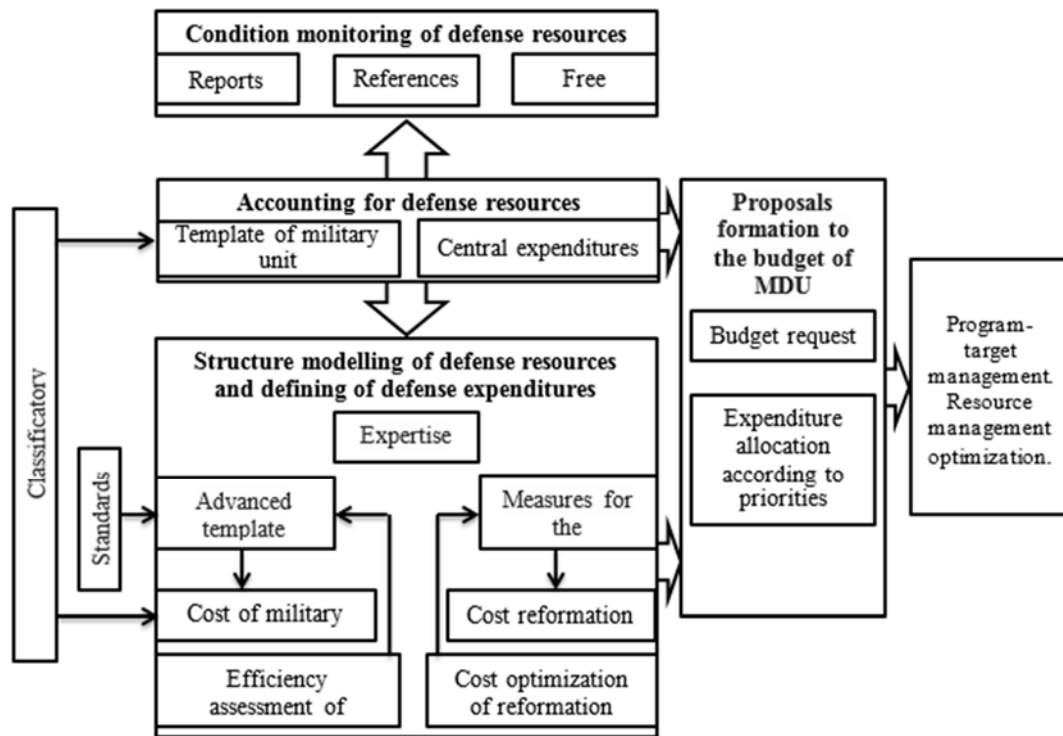


Figure 14. Functional Structure of the IAS "Resource"²¹²

The core of the software complex is "accounting of defense resources" (Figure 14). It is divided into two parts: the local version is a template for every military units, and a global version which contains the full functionality for analytical processing of information. This global version covers every branch of military units as can be viewed separately, under subordination, or in the entire AFU. This software also contains factual and normative indicators of resources, quantitative, qualitative, and cost indicators of resources. Accounting is carried out in an approved template of a military unit. This template is a summary statistical document which characterizes the condition of military units and its costs.

²¹² Ibid. p. 18.

Table 3. Software Complexes of the IAS “Resource”

Name of software complex	Purpose
Accounting for defense resources (Template)	To input data about the condition and cost of military units
Condition monitoring of defense resources (Monitoring)	To view data about the actual and potential structure and composition of the AFU, their condition and maintenance costs
Getting arbitrary reports (Free reports)	For the formation of arbitrary information (reports) about the actual and potential structure and composition of the AFU, their condition and maintenance costs
Obtaining regulatory reports (Regulatory reports)	To generate and view regulated reports about actual and potential structure and composition of the AFU, their condition and maintenance costs
Input of reference data and classifiers (Standards)	To input reference data and classifiers
Determining the cost of advanced military units (Advanced template)	For creating and maintaining forms promising military units on a certain date
The planning of measures for the reformation of the AFU and prediction of the AFU in the implementation of organizational measures to reform (Planning organizational activities)	To determine the organizational measures for the reform of the AFU
Assessment of the costs of carrying out the organizational measures on the reform of AFU (Cost of organizational measures)	To calculate the cost of conducting organizational measures
Information exchange (Interchange)	For the organization of information exchange between objects the IAS “Resource” and with other systems
Expert assessment of the state military formations (Expertise)	For the evaluation of conducting of military units
Database administrator	To restrict access to database objects
Proposals formation to the budget (Budget)	To formulate proposals to the budget of the MDU
Accounting for centralized expenditures (Centralized expenditures)	To input data for centralized expenditures of divisions of the MDU and the GS

In addition, the IAS “Resource” includes a number of software systems (Figure 14) that can be used during the execution of organizational measures, modeling perspective the AFU. The most interesting is the software complex “expert assessment.” It “is intended for examination to determine the condition of military units.”²¹³

There are functions of that complex: “creation a domain model for peer review, formation of the list of evaluated alternatives, creation of an expert group, assessment of alternative model, performing calculations and processing of the results, formation reports of peer review.”²¹⁴ However, since its creation, this software package has not been used by any department of the MDU or directorate of the GS. This software models different groupings of the AFU. It could be most popular in the Main Directorate of Operational Management of the GS, the Armament of the AFU, and the Logistics of the AFU, but these units prefer to use their own experience rather than work with software. Moreover, this software package never has been used to study alternatives and forecasting of using of groups of the AFU in performance of scenarios and during training exercises. This has led to the decline of this software and the processing of statistical reports in other software systems. Actually, the IAS “Resource” has the ability to replace and exclude most of the documents, namely accounting with financial accounting of logistical support of weapons and equipment. It was planned to do so, but unfortunately did not acquire practical importance not only in subdivisions of the GS, but in the MDDMP. Actually, experts believe it is better to get information from departments and divisions which are relevant to accounting than to apply for obtaining the report from the IAS “Resource.”

B. THE CAUSES OF IAS “RESOURCE” FAILURE

Thus, if the IAS “Resource” should be good software, why is it a failure? The Ukrainian army has taken significant steps in the development and implementation of the IAS “Resource.” Efforts made have provided some momentum for its use. At the same time, due to insufficient funding and distrust of electronic accounting systems, these

²¹³ Ibid.

²¹⁴ Ibid., 21.

efforts have lost momentum since 2010. For certain political and military-political conditions, the MDU and the GS began to abandon opportunities presented by IAS “Resource.” This was facilitated by many causes, chiefly personnel reduction and large and significant errors in accounting. The creation of the IAS “Resource” was done under the leadership of Shelest. When he left the position of the Chief of the Main Directorate of Defense Planning of the GS, continued use of the IAS “Resource” became questionable.

The next cause is a consequence of the first one—personnel reductions. Starting in 2010, the decline in defense planning began. The reasons for that issue was as follows: continuous change in political course, mindless reform (reduce the regular positions in military units), changing leadership of the AFU, the arrival of experts who did not value defense planning and opposed transparency in the reporting and planning indicators.

Currently, such an attitude has led to a chaotic support of military units due to lack of planning. The inability to organize logistical support shows in the area of the ATO. Today, only volunteers can make troops be able to perform tasks as directed. But volunteers can provide military clothing, first aid, food, and organization of everyday life but cannot provide fuel, equipment, and ammunition. There is a huge gap in national defense due to unappropriated planning and execution of responsibility from the leadership side of the GS and the MDU.

Since 2009, force management officers in military units who worked with the IAS “Resource” were dismissed on grounds of redundancy. Moreover, the number of personnel in the IPCDP was reduced and its full elimination was planned by 2014. Fortunately, the IPCDP still exists due to current situation in Ukraine. However, the IPCDP exists only to maintain the IAS “Resource” in working condition. Thereby, the second direction of the IPCDP could not work appropriately, because there are no experts with considerable knowledge. The IPCDP has some personnel who can work on computers and can maintain only the processing server of the IPCDP in working condition. For those still remaining in some military units, the PC station of the IAS “Resource” has no experts to establish and restore (update) database and software. Personnel for work with the IAS “Resource” were trained in The Training Center in

Nikolaev, but since 2010 the number of those specialists has gradually been reduced, and in 2013 this Center was eliminated. Currently, such specialists receive no training. Thus, in three to five years almost all specialists will disappear.

Therefore, over time (2011–2013), in connection with the reduction specialists of force management in military units (reduction or attract to perform different [not duty] tasks and functions) input data to the IAS “Resource” has become completely flawed, especially in the identification capabilities, accounting of weapons, and military equipment. Consequently, almost all decisions were created in the directorates of the GS by manual method. Thus, the second direction of the IPCDP operation started to receive inaccurate and inconsistent information. Reports from the IPCDP and referenced data have had significant deviations, and thus those reports are being declined. First, it is a distrust of preparing a template of a military unit. Because the most specialists of force management in military units have been reduced, the form is filled out by unauthorized and unqualified officers who make sometimes critical mistakes.

Next, the IAS “Resource” is untruthful because when an error is detected, it is better to correct the error by management than in some software. At the same time, the IAS “Resource” performs other calculations and produces analytical reports, which unfortunately remain only on paper. The most requested forms are the financial indicators, but they are produced with the assistance of the financial divisions of the MDU and the GS for the reasons previously stated. That is why currently the IAS “Resource” is more like a system that only deals with statistical information that is barely used.

Finally, the most painful cause of failure is the complex legislation needed to maintain the confidentiality of information in the AFU. This contributed to the training personnel from the Soviet Union and a bureaucratic system designed to protect information that has not been updated since 1995–1997. When the IAS “Resource” was first implemented, Shelest created conditions and developed the documentation to fully display this system. Thus, it was envisaged that the IAS “Resource” should work in an open network (the Internet) and a closed network. Unfortunately, Shelest’s idea was not realized. Thus, initially in the MDU there were put into operation the Intranet “Dnipro”

(partially open network), the “Karpaty” (closed network), and as a backup channel, satellite communication.. At that time, the closed channels of communication began to develop from the company unit to GS with servers in the operational commands. But, Shelest’s retirement due to cost reductions and policy revisions, these developments were forgotten. For instance, the attempt to deploy a fiber optic network of local connections in one office between three PC resources is almost impossible through the regulations of the State Service of Special Communication and Information Protection of Ukraine. To create a fiber optical local area network amongst three PCs to commission the IAS “Resource,” it is required a hundred requests, and more than thirty permits for accounting and processing of the “Template of a military unit” from the various instances. This has created another problem: the accumulation of contradictory instructions, laws, regulations, directives, and different kinds of methods does not allow users to take initiative on the spot, and eliminates the possibility of carrying out independent decision-making and actions.

C. QUESTION ABOUT THE FUTURE OF THE IAS “RESOURCE”

The issue about the continuing existence of the IAS “Resource” is questionable. This system was created for defense planning support, but in spite of the correct initial use, the development of the IAS “Resource” went in the wrong direction. The system was transformed into an accounting database able to analyze the readiness of single units. However, today the system (Figure 15) does not work properly due to the previously mentioned causes. There are two possible ways for the further improvement of the IAS “Resource.”

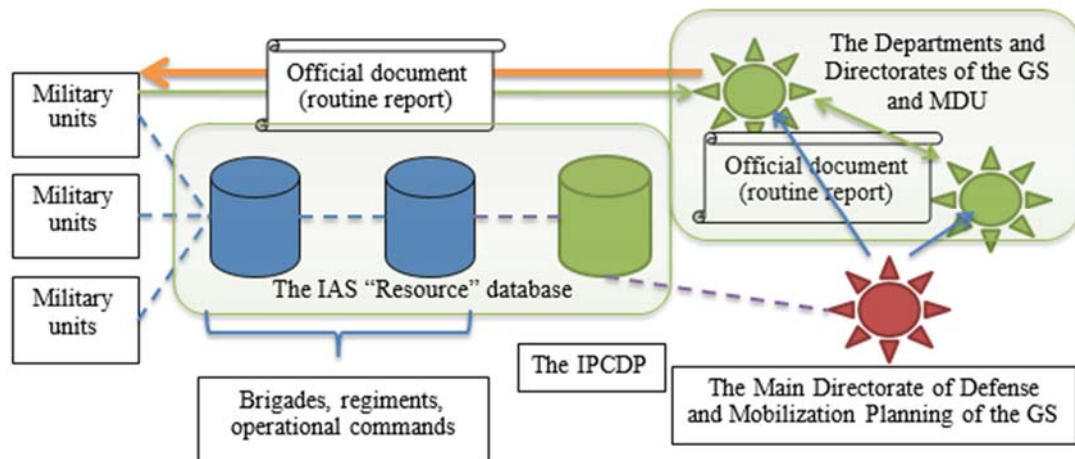


Figure 15. Existing Scheme of Working IAS “Resource”

First, the IAS “Resource” should be upgraded. It will be costly and take a long time. The following changes are necessary for restoring the performance capabilities of the IAS “Resource.”

(1) First, the MDU should give tasks to a research institute working on the development and commissioning of the unified IAS of defense planning support on the basis of the IAS “Resource,” but more advanced, and which can be connected to almost all the IASs or their shares and be given to databases in the same format which can use other military formation for their IASs. However, for a successful performance, the research institute must have a clear and detailed description of the technology requirements of the unified IAS from the MDU, the GS, and services of the AFU. Otherwise, a private research institute or a private firm should develop what the military might actually need. This unified UIAS should contain a database for couple of levels of access (see Appendix C):

(a) Level to battalion: general data; the possibility of a military unit for performing tasks on situations of using the AFU; unit tasks and capabilities in accordance with the situations of its using; the scheme of organization of military units in the state of wartime and peacetime; number of personnel on the staff of wartime and peacetime, the actual staffing; number of main armament and military equipment by state wartime and

peacetime, the actual staffing; tasks that units must perform to ensure readiness to perform tasks on situations of their using. In this level commanders of the system will help the commander to make necessary decisions.

(b) Level to brigade: besides Level 1; territorial divisions and information about the capability of local enterprises and authorities; availability of mobilization resource and transport; interaction with other security agencies and their operational objectives in their territory.

(c) Level the MDU and the GS: organization of civil protection, territorial defense, census of population and transport, the ability of other agencies; availability of resources of the state defense-industrial complex, the procedures for their use; the ability to obtain information about the existence of any resources, and strategic objectives of agencies; defense and budget planning, adjustment of defense expenditures, execution control of financing and program implementation.

(d) Level of the CMU, the NSDCU: report of information and analysis about the challenges and threats of the state (just for general analysis).

Thus, having such level-based the unified IAS makes it possible to have all the required parameters and data at the appropriate levels; to quickly obtain the necessary information and to have a single register and record of all logistical resources and population. This software package should be able to view the model of threat situations.

(2) The following points are a provided proposal for the unified IAS for analysis and maintaining of information, its processing and analysis, and providing a database: all subsystems should operate both in the general interface and the separate international standards ISO 12207 and ISO 9000–3 should be on hold; database in shared tables and the possibility of getting arbitrary reference with distribution and delimitation access rights according to official positions; using of common and international guides and translators; exchange of information between subsystems on the basis of a single document circulation that will identify the layers of the structure and to determine who can enter the system (this can distribute to layers level from the company to the highest

with limited or complete access. This is the layer systems and subsystems that will provide input processing and analysis of information).

(3) Next, to build a unified IAS. It must be reproduced on four levels: (a) executive level—it exists, but without enough frequency for efficiency, and it is required the certain number of personnel in military units; (b) level link-local objects—it is absent because of some legal regulations which prohibit the use of specified database in the local network and Internet resources; (c) level of information-analytical support in accordance with interlayer interaction between agencies—this is for unified work in a single system and form; (d) inter-level communication—it is complete absent (approval of documents and receiving arbitrary references is possible only with official request for information would within ten to twenty days). Thus, the unified IAS would make the Timecard Urgent Reports²¹⁵ obsolete and give all necessary information through its own subsystems. This is possible only if several conditions previously described will occur and increase the unified IAS experts in military units, fully implement the unified IAS, and create the local exchange network information obligations with frequency changes in the database (financial services, defense planning, and logistics experts).

(4). Ensuring the accuracy of the information: input and output. A necessary condition for ensuring the accuracy of the information is the unconditional observance of the principle of a single input (but within a constant period—through the required frequency) and reused information. With the accounting implementation into the AFU, basic work with the primary accounting of the defense resources of all types (assets, property, arms, ammunition, equipment, finance, and personnel) is practically concentrated in financial sections of military. The issues of automation of the processes of formation of arrays of information in respect of financial, material and other resources are not well developed both in theory and in practice.

Therefore, further studies should be conducted from the perspective of unifying all the IASs into a single database: accounting for personnel qualified for military service, an accounting system for transport of the Ministry of Internal Affairs of Ukraine,

²¹⁵ This is classified list of forms and time schedules for urgent reports within the MDU, the GS and the AFU that approved by order of Ministry of Defense.

accounting for the availability and capability of the defense-industrial complex. Thus, such a system would allow full automation and a closed loop operation of most departments and directorates. Further, it is possible to connect strategic system assessment and forecasting and to provide full access to an information crisis center or a center of military command and control forces.

Thus, this upgraded IAS “Resource” would avoid significant workflow, reduce the volume of paperwork and routine reports (by about 80%²¹⁶), eliminate false data from different data sources, reduce reporting of information online (a weekly upgrade), provide interoperability with other agencies, give a full picture of the real and the actual posture in the state economy and in the defense-industrial complex, and provide an opportunity for continuous and fruitful work by state authorities. However, it should be noted that in the first years, no significant effect would be felt because of the necessity (at least five to seven years): (1) to teach the personnel (with the experience of foreign experts of the NATO countries); (2) to develop and hire staff and to hire military specialists of force management; (3) to develop technical protocol for information security, and so on; (4) to exclude strictly and comprehensively the cases and attempts of chiefs of departments or directorates the WDU and the GS to operate under the obsolete standards; (5) to process the majority of normative and legislative acts, including guidelines of service of information assurance, which are currently unclear, and sometimes unacceptable and make impossible to perform most of the activities. Of course, this requires the appropriate resource and the assistance of foreign specialists.

Thus, upgrading the IAS “Resource” needs tremendous investment, personnel, and time, but unfortunately the previously mentioned changes do not help to improve the decision-making process in the MDU and the GS. However, it will be a perfect accounting system for any resources that can create prospective schemes of unit structure or strength of personnel (according to category and specialization).

²¹⁶ Nowadays, in MDU, GS, and AFU all routine reports are created and submitted according to the Table of Routine Report (classified, approved by the Order of Minister of Defense) legacy of the Soviet Union Army.

The second step is more difficult because it will involve political decisions, but could be less costly. Moreover, it could help to move from Eastern norms to Western ones in force management, to support the decision-making process as initially planned, and money spent will not become a sunk cost. Thus, the following changes are necessary.

(1) The most difficult political decision is to replace officers in the GS and the MDU by appointing people who can and actually want to work. If they have foreign education, they can think “outside of the box” and act with initiative and creativity. However, it does not mean discharging all personnel at once, but starting to turn in a critical direction that needs to be reflected in defense and budget planning, acquisition, and personnel distribution.

(2) As soon as possible, completely change military legislation to move away from the Soviet Union legacy of complete centralization. The purpose is to give responsibilities to commanders: to provide more rights and opportunities, to allow commanders to make their own decisions about training and how they deliver capabilities, unit support, etc. However, it is first necessary to make a full audit of units (to eliminate surplus materials and excess reserves) and to set boundaries and limit expenditures on fuel and ammunition while conducting exercises (to avoid corruption and the feeling of permissiveness). In the follow up, the commanders will have full responsibility, but preliminary action will show who can manage it.

(3) The most painful issue is budgeting. It is important to give responsibility to senior commanders to manage their forces’ budget. This plays a key role in capability of units and the decision-making process as well. Money is everything. However, it should begin gradually with educational support to select officials. For instance: (1) to designate two to three battalion and one to two brigades structures in every services; (2) to task the Department of Finance of the MDU to create a one-month education course in every service Academy (including the National Defense University of Ukraine) for commanders, and to make such a course obligatory in the education system of cadets; (3) by the end of the budget year to train commanders of defined battalions and brigades; (4) for the next year to allocate a budget for them and monitor their management. During real practice it is possible to define who is able to make budget decisions; (5) to expand the

number of units and thus to give commanders full responsibility and initiative in decision-making. In this case the audit units (with completely replacement personnel) will provide a real audit of a unit's activity, but not an old type of inspection. The GS and the MDU will be occupied in their actual task: management of the AFU on operational-strategic level and policy-making accordingly.

(4) The software “Ruslo” should replace “Parus”²¹⁷ in financial accounting first of all in the defined units previously shown. At the same time, using this software should be in the curriculum of financial officers and introduced for commanders.

(5) The Report of the State Secret Information and the legislation on this issue should be reviewed and reissued. Once more, to get away from the Soviet Union heritage, more information needs to be freely available. Thus, it is necessary to provide more transparency and freedom to work with the PC.

(6) Digital signatures should be implemented as soon as possible to replace needless paperwork.

(7) The IAS “Resource” should be retained in its existing condition. However, for it to be developed, it is necessary to give tasks to the Departments and Directorates of the MDU and the GS and commanders of units of the AFU to develop a set of requirements for subsystems. It should not be unreal or virtual and contain real outcomes: what information or report the subsystem should provide, and how it helps to make certain decisions.

Thus, the main and the difficult issue of the second step is its replacement. This is first of all a political decision. However, the best way to build something new is to completely abandon the old basis, even if it was once good and stable. Otherwise, it is a reconstruction: the color and the shape could be different, but the core is the same. The most appropriate, painless, economical, and efficient way in Ukraine is to gradually build new military units with new awareness, and little-by-little to replace all old units.

²¹⁷ “Parus” is a financial accounting software that the Department of Finance of the MDU is using now.

Regarding the MDU and the GD, it is necessary to sharply depart from the Soviet Union legacy.

D. CONCLUSION

The IAS “Resource” was initially created for defense planning support, but actually it is for force management and unfortunately cannot support decision-making process in its current form.

This chapter explains the IAS “Resource,” shows the causes of its failure, and proposes its use further. However, without understanding what tasks the IAS “Resource” should execute, it makes little sense to upgrade this software. The IAS “Resource” should exist as a tool for force management, but in which conditions: for resource and budget accounting or for decision-making support? The decision of weighing costs and timelines should be made by high military authority.

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VI. RECOMMENDATIONS FOR CONDUCTING DEFENSE PLANNING IN THE MINISTRY OF DEFENSE OF UKRAINE.

From the previous chapters, for effectively conducting defense planning and avoiding future mistakes, changes must be made in this sphere as soon as possible. In addition, the MDU and the GS needed to be reorganized. Military authorities agreed with this need and at the beginning of 2015 announced a number of personnel changes. Unfortunately, promotions will be made without adequate valuation of skills and experience, but in the presence of ATO experience. Such policy is absolutely correct in the case of commanders at different levels, but it should be carefully evaluated for other specific positions.

This chapter provides some key recommendations for conducting and supporting defense planning in the MDU and the GS: (1) the need to eliminate Soviet legal concepts through the abolition of the Military Doctrine, (2) conducting the DR based on the Western practice, (3) human resource and institution changes through decentralization, (4) restructuring the defense program.

A. LEGISLATION SHOULD SUPPORT TO CONDUCTING DEFENSE PLANNING

Ukrainian legislation concerning the defense sphere needs many changes, but not because of defense planning. It was created in a hurry after Ukraine's independence and has received many amendments (such amendments were unfortunately not an improvement, but contained some useful necessities) Therefore, due to the current situation in Ukraine, it is reasonable to make some amendments. The MDU and the GS should work together to replace the Eastern pattern with the Western one (Table 1).

The first step is that the *Military Doctrine of Ukraine*²¹⁸ needs to be replaced. It is a failed legacy of Soviet time. Moreover, this is the basis for almost all documents of defense planning on all its stages. It could be a Strategic Defense Guidance that replaced

²¹⁸ President of Ukraine. Decree of June 15, 2004, № 648/2004, *About Military Doctrine of Ukraine* <http://zakon4.rada.gov.ua/laws/show/648/2004>.

the Military Doctrine. However, it should not be government work, but created from the bottom-up by involving the AFU. This guidance should have clear priorities, tasks, and capabilities that the AFU needs to fulfill. It is important to clearly and directly define conditions of application and capabilities of the AFU for defense during aggression, participation in the operations in its territory, and conditions of application of the military organization. As required, the DR should provide necessary changes to this guidance. The final and significant issue is linking the Military Doctrine with resources. The Strategic Defense Guidance should not have slogans, but should provide real priorities according to available resources.

The current project of the National Defense Strategy²¹⁹ was represented as a base for a new Military Doctrine and, without changes in legislation, will beget a new pile of different programs and plans. The former Soviet Union system where one plan creates another, and another, and a set of plans at the tactical level still exists. The project of the National Defense Strategy includes the next important issues: (1) outside (Russia) and inside (ineffective national security support system, corruption, economic and financial crisis, and so on) threats; (2) NATO membership; (3) new direction in partnership (the USA and Europe); (4) armament of the AFU and renewal of the rocket shield; (5) widespread corruption; (6) energy security. In addition, the issue about nuclear weapons was arisen,²²⁰ but decisions are still unclear. The National Defense Strategy remains until 2020. However, the biggest weakness is that the National Defense Strategy states that the level of state funding of security and defense sector should not be less than 5% of the GDP. The bad experience of defense funding (Figures 6 and 10) that was actually approved was not less than 3% of the GDP,²²¹ but such percentage of the GDP had never happened until recent events in Ukraine. The challenge here is to create a project with available resources. It is possible to assume that this strategy will be a failure

²¹⁹ “Key points of the draft of the new National Security Strategy,” on April 22, 2015, *Bleak Sea News*, <http://www.blackseanews.net/read/97987>.

²²⁰ Ibid.

²²¹ Verkhovna Rada of Ukraine. Law of December 6, 1991, no. 1932-XII, *About the Defense of Ukraine*. <http://zakon4.rada.gov.ua/laws/show/1932-12>.

as well because it is based on the Eastern pattern of the Military Doctrine, which is focused on the process, not the results.

Next, the law *About the Organization of Defense Planning*²²² should be remade or even canceled. Besides, this law for all agencies in defense planning exists in just the AFU. Thus, this law could be replaced by Guidance of Defense planning, which has to define responsibility for implementing regulatory documents of defense planning and terms of their execution.

The MDU infrastructure (i.e., warehouses, arsenals, bases of the ammunition storage) should be transferred to the Department of Economic Activity of the MDU, be taken from the AFU, and entered as a separate structure. Also, units of Housing provisions should be taken out and made part of a non-military structure. Conditions should be provided for the signing of contracts with companies (for outsourcing as well) both in peacetime and during combat missions. But first, there is necessity to perform financial and technical audit of the defense industry, their capabilities and the need to restructure, to evaluate the real potential of the industry, and to define its structure (a list of enterprises subject to assistance or liquidation, leaving the state sector or privatized). However, it is necessary to take into account the prospects for participation of enterprises in addressing the needs within the real volume of defense contracts as well as human resources and the social protection of personnel freed.

For defense budget transparency every year in the last decade of budget approval, the following issues have been included in the parliamentary hearings: assessment of the condition and effectiveness of the all security sector agencies; prospects of proposed defense development programs for next year, and the needs of the military organization for the next year.

In addition, there are different kinds of middle- or long-term target or state defense programs that were developed by the MDU and the GS and approved by the government. They are repetitive and barely executed because of overly ambitious plans, a

²²² Verkhovna Rada of Ukraine. Law of November 18, 2004, № 2198-IV, article 9, *About the Organization of Defense Planning*. <http://zakon4.rada.gov.ua/laws/show/2198-15>.

lot of bureaucracy, the absence of force management, understanding of efficient resource allocation, and transparency. For instance, the National program of building military carrier An-70²²³ was approved for 2004–2022 and included in *the State Program of the Armed Forces of Ukraine for 2006–2011*,²²⁴ and *The State Complex Program of Reformation and Development of the Armed Forces of Ukraine Until 2017*,²²⁵ but the information about the execution during this period is missing. Twenty years of failure in executing these programs shows that the MDU and the GS must eliminate all legacy planning documents. The MDU and the GS have to work on programs that they need to fulfill the AFU's tasks and capabilities, and demonstrate the need for a budget. Finally, the MDU and the GS have to apply their efforts to shift from an Eastern pattern to a Western one through purging Soviet concepts, documents, and, most important—thinking.

B. PRIORITIES IN CONDUCTION OF DEFENSE REVIEW

On the basis of the current situation in Ukraine, a comprehensive review of the security sector should be conducted during 2015 and a new National Security Strategy should be developed based on it, not the Military Doctrine. Also, it is necessary to establish a three-year comprehensive review cycle of the state of the national security system and its components, and develop and adjust middle-term development programs. For effectiveness and transparency of the DR, international experts and non-government agencies should be involved.

The DR should provide link defense strategy to the armed forces and resources. Resources are sometimes limited to money and personnel, but actually encompasses all

²²³ Verkhovna Rada of Ukraine. Law of February 5, 2004, №1462-IV, *About the National Program of Building Military Carrier An-70 and its Procurements Under the State Defense Request*, <http://zakon4.rada.gov.ua/laws/show/1462-15>.

²²⁴ President of Ukraine, Decree of December 27, 2005, № 1862–25/2005 (restricted) *About Decision of the National Security and Defense Council of Ukraine on December 9, 2005 “About the State Program of Development the Armed Forces of Ukraine for 2006–2011.”*

²²⁵ President of Ukraine, Decree of September 2, 2013, № 479/2013, *About Decision of the National Security and Defense Council of Ukraine on September 2, 2013 “About The State Complex Program of Reformation and Development of the Armed Forces of Ukraine Until 2017.”* <http://zakon4.rada.gov.ua/laws/show/479/2013>.

of these: money, personnel, materials, infrastructure, armament and military equipment, etc. “Ideally, the government’s strategic objectives are matched to capabilities and resources to entire change or maintain those capabilities.”²²⁶ The workgroup from the conference on the Center for Strategic and International Studies²²⁷ discussed primary phases, steps, and useful questions for conducting the SDR. Thus, there are three phases of the SDR²²⁸: (1) strategic assessment, (2) policy development, (3) decisions and implementation. There can be seven steps in each phase:²²⁹ (1) preparation, (2) review of the security environment —setting the national policy framework, (3) establishing a planning assumption, (4) defining military tasks, (5) developing force structure options, (6) making decisions, and (7) announcements and implementation.

In the first phase, the DR observes defense planning from the standpoint of national strategy: security and foreign policy. From the national interests, the strategic direction, future defense policy, and a variety of scenarios are defined. The result of this assessment is a set of military tasks and missions that need to be accomplished, and then activities, capabilities, and resources that need to be undertaken to support those tasks. The second phase includes an examination of internal and external politics, mostly in different kinds of financial and social issues. The third phase would review force structure options. This is the most important phase, because these options should meet the requirements of the armed forces with available resources. The most difficult decision-making process is how to put together availability of funding, personnel, and analytic tools to accomplish defined tasks. The workgroup²³⁰ gathered best practices for the analysis of force structure options: (1) take a resource-informed view; (2) look at defense planning in a large national context; (3) make assumptions explicit; (4) make a list of priority missions, with levels of capabilities; (5) focus on training, life cycle cost, and

²²⁶ Jennifer M. Taylor, Emily Boggs, *Strategic Defense Reviews: Procedures, Frameworks, and Tools to Enhance Future Defense Institution Building Project* (ISBN 978-0-89206-670-4) (Washington, DC: Center for Strategic and International Studies, September 2011), 3
http://csis.org/files/publication/110930_Taylor_StratDefRev_WEB.pdf.

²²⁷ Ibid., 8.

²²⁸ Ibid.

²²⁹ Ibid.

²³⁰ Ibid., 9.

other nonmaterial solutions; (6) follow through on conducting annual updates to track initiatives in the planning document. Finally, when all information is in decision-makers' hands and decisions are made, the final stage of the last phase can begin—implement the annual assessment and adjust as required.

Should the DR be periodic? To begin with, the legal foundation of the DR in the UK was not regularly conducted until 2010, when a five-year cycle DR was mandated. Since 1995, a DR has been conducted every four years in the USA. This process depends on the ability of the state to manage and support it, because the DR can be a labor intensive process. It is important to have a willingness of political authority to do it properly and experienced experts who can think outside the box, be transparent, and be sources of reliable information. Jennifer M. Taylor argues that “[l]ack of capable and experienced strategic thinkers, lack of a robust planning culture, inadequate data collection, and domestic politics can all undermine good intentions of defense leaders looking to complete a useful review.”²³¹ However, a periodic DR has the risk of turning into routine work without effective results, whereas a DR on demand a priori can provide some new developments. In addition, it would be reasonable to provide the practice of the United States to conduct defense reviews not just in the defense sphere, but also separately by the service of the AFU (Army, Navy, and Air Force), defense industry/acquisitions, personnel.

C. CHALLENGE OF HUMAN RESOURCES AND INSTITUTIONAL STRUCTURE CHANGES

The current situation shows the willingness of the president, the majority of members of the VRU and the volunteer movement to build a strong, capable army. Unfortunately, the personnel in key positions in the MDU and the GS remain the same. Moreover, the education system is a legacy from the Soviet Union. If the basis for education on the tactical level is rather effective, the next two levels—operation-tactical and operation-strategic—are long-term and useless for professional and skill improvement. It is not an issue for this work, but it is necessary to completely change the

²³¹ Ibid., 3.

educational system for these two levels: it should be from one to two weeks of courses for two to three months, depending on the complexity of the training.

Thereby, the MDU and the GS need cardinal changes: completely change all personnel, especially in key positions. Due to the war in Ukraine, it is necessary to carefully choose the officers and civilian personnel for every position. People should be open-minded, be ready to learn quickly, and work for the country but not themselves. The important point is that officers or civilians should be ready to make decisions. In this case, responsibility should be defined very carefully but clearly.

Relative to defense planning, the general management of defense planning should reside with a deputy chief of the GS. In this case, conducting of defense planning will not be just a gathering of information and creating the TPMD and PMD, but this deputy chief has to be able to make decisions about necessary changes in plans and projects. Thus, this person would have responsibility for consequences and results.

The Directorate of Defense Planning should be separated from the MDDMP (separate defense planning from mobilization). The sections of this new Directorate should be divided according to the Main Forces Programs that is discussed in the next part of this chapter. Each section should have a separate program manager with the responsibility to create, monitor, and support projects from the beginning to the end. This section should be responsible for submitting proposals about execution of the program and analyzing the risk of underfunding. Currently, the Department of Finance of the MDU actually makes changes in budget expenditures, and just after that changes have accumulated quarterly, then they go to the PMD. This practice creates a complete mess by the end of the year. Thus, this decision about changes, reductions, or the cancelation of projects within the program should be suggested by a responsible sector from the Directorate of Defense Planning. The deputy chief of the GS has to make a final decision, but in individual cases, some issues can be reported to the Chief of GS and the Minister of Defense of Ukraine. In addition, one sector should be responsible for procurement process to manage procurement cases across programs.

Moreover, to create the PMD, special working groups should be formed according to the clusters of the PMD. Its composition, besides specialists from operational, logistic, financial, personnel and other sectors, should include specialists from the services of the AFU. The Commanders of the services of the AFU should have responsibility and make a decision on how they need to be formed and train subordinated units.

To avoid confusion with the responsibility now, reform could begin as a pilot-project in the Navy of the AFU. It might be the easiest way to re-build the Navy which was barely destroyed after Crimea's annexation. Moreover, many navy officers have education and international training abroad. Thus, this pilot project would give the Navy Commander the financial and planning responsibility to build capability and fulfill given tasks that will demonstrate how the Navy Commander can make efficient and effective resource management and defense planning. It should help to make a more rational use of personnel and reduce the time needed for the preparation of justification and decision-making. Also it helps to simplify and make the formation and execution of the budget more transparent. Moreover, the Navy Commander will know about units' capability, their costs, resources allocation, and will be responsible for the units' ability to fulfill the given tasks. Making changes within every service and inside the MDU and the GS would link defense planning with financial resources, operational plans, and a more effective decision-making process.

Finally, volunteer movements in the AFU should be discussed. The Ukrainian army failed to prove necessary logistical support and volunteers have been helping soldiers in the ATO to survive. Thus, the MDU and the GS should employ volunteers' help without creating bureaucratic obstacles. On behalf of the MDU and the GS volunteers should be kept on necessary positions and replaced specialists who is unable to fulfill the tasks.

D. RESTRUCTURING OF DEFENSE PROGRAMS

Chapter I briefly describes existing defense programs. The structure of a budget program is a government standard, so it is almost impossible to change it in the MDU, let

alone others' state agencies. Thus, the defense programs have been changed since their development. These programs have always been adjusted under budget programs for convenient transformation. However, the defense programs (clusters [subclusters]) need to be changed. This section proposes changes in the defense program structure (clusters [subclusters]) and implementing project integrity.

1. Defense Program Structure

Due to the necessity to have transparent cost information, it is reasonable to organize the structure of the defense program based on Future Years Defense Program Structure²³² of the DOD (Figure 16):

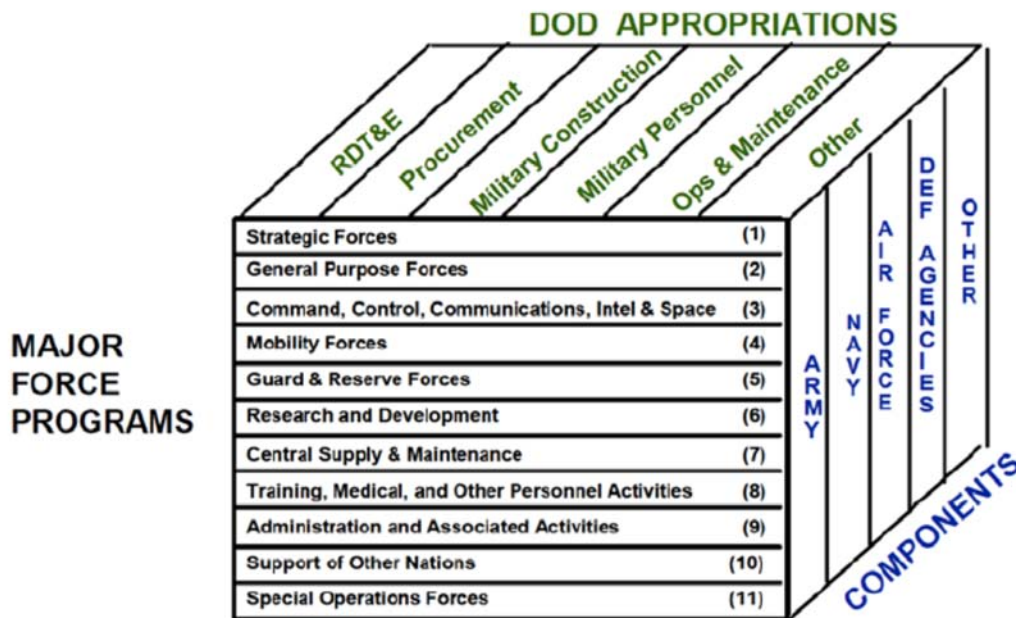


Figure 16. Future Years Defense Program Structure of DOD

The first step is DOD appropriations. The structure of DOD appropriations is almost identical to the MDU defense programs, but not budget programs—an analogue of appropriations. Unfortunately, the budget planning system in Ukraine is common to all

²³² Lisa Potvin, "Practical Financial Management: A Handbook for the Defense Department Financial Management," (Naval Postgraduate School, November 2011, 11th Edition), 65.
<http://www.nps.edu/Academics/Schools/GSBPP/docs/PCC/FMGuide.pdf>.

state agencies. Every agency manager has budget expenditures and a list of certain budget programs, some of which are mandated in the following categories: authority administration, medicine, and education. The difficulty is that all these programs repeat the same expenditures which complicates transparency and understanding of the expenditures. Besides, budget programs, except the basic ones, can change from year to year. Since, it is impossible to change budget planning system only in the MDU (without involving other agencies), and in regard to the simple transformation of defense program to budget, it is reasonable to put on this side the clusters (subclusters) of the PMD. However, these clusters need some changes.

Thus, the proposal of the list of new clusters (subclusters) is similar with NATO allocation: (1) Personnel Cost, (2) Operational and Maintenance Cost, (3) Procurement, (4) Construction, (5) R&D, (6) Other Expenditures.

1. Personnel cost
 - a. Military personnel
 - i. Payment and allowances
 - ii. Employer's contribution to retirement and social funds
 - iii. Other (uniform, food, travelling cost, medical insurance, etc.)
 - b. Civilian personnel
 - i. Payment and allowances
 - ii. Employer's contribution to retirement and social funds
2. Operations and maintenance cost
 - i. Ammunition and explosive
 - ii. Petroleum products
 - iii. Spare parts (cost concerning current repairs in the military units)
 - iv. Other equipment and supplies (including medical and educational costs)
 - v. Rents
 1. Administration
 2. Housing
 - vi. Other operations and maintenance
3. Procurement
 - a. Missile system
 - b. Missiles (conventional weapons)

- c. Nuclear weapon²³³
- d. Aircraft and support system
- e. Artillery
- f. Combat vehicles
- g. Engineering equipment
- h. Weapons and small arms
- i. Transport vehicles
- j. Ships, harbor craft, and support system
- k. Electronic and communications equipment
- 4. Construction
 - a. Military constructions
 - i. Building
 - ii. Rebuilding
 - iii. Repairing
 - b. Military housing
 - i. Buying
 - ii. Building
 - iii. Rebuilding
 - iv. Dormitory
- 5. R&D
- 6. Other expenditures

The next step is components. There is almost no difference between these forces: Army, Navy, Air Force, the MDU and the GS, and other military units. Creating Special Operation Forces is still discussed in the MDU and the GS.²³⁴ If it were created, the new component would be added. Components of the MDU and the GS should not include support units and units of the central subordinate. However, for successful implementation, it is necessary to give budget responsibility to branches; otherwise this structure is useless, because the allocation of expenditure remains unchanged. Moreover, cost definitions will never be corrected without the services taking greater responsibility. Although it may be impossible to change everything at once, it is reasonable to change it gradually, starting with the Navy. The Navy would be a good start because of Ukraine's current situation: it should be created from the base when it is relatively not so large and

²³³ It is necessary if the decision about nuclear weapon in Ukraine is made.

²³⁴ "The Special Operation Forces will be created in Ukraine," on April 20, 2015, *Korrespondent.net*, <http://korrespondent.net/ukraine/3505708-v-ukrayne-sozhdadut-syly-spetsyalnykh-operatsyi>.

complex. Thus, it is possible to do it as a pilot project creating sections of defense planning and financial management.

Finally, the third component is the Major Force Programs. Initially the GS tried attempt to create it, but because of the complexity of resource allocation and management approach this attempt was denied. Thus, the Major Force Programs could include the following:

(1) The Immediate Response Force (projects for organization and associated procurement of weapon systems, training for military units of highly mobile airborne troops, naval infantry, military unit intelligence, and a special purpose brigade of ships).

(2) The Rapid Reaction Force (projects for the procurement of weapon systems, training for mechanized, artillery, (rocket artillery) and missile brigades (regiments), aviation and anti-aircraft missile units).

(3) The Reserve Forces (projects for units for training personnel for increasing forces of constant readiness and deployment of parts of the territorial defense in the event of a threat of armed aggression).

(4) Command, Control, Communication, and Intelligence (projects for communication, security, intelligence, and function of mapping, weather service, cyber control and security, and so on).

(5) Research and Development (projects and activities that have not been approved for operational use yet).

(6) Supply and Maintenance (resources for support units, storehouses and depots that related to supply, maintenance, and service activities).

(7) Training, Medical, and Other General Personnel Activities (resources for personnel: education, training, duty travelling, food and uniform, health care, family housing and so on).

(8) Administrative Activities (resources for the administrative support of the MDU and the GS).

Figure 17 covers the Annual Defense Program Structure.

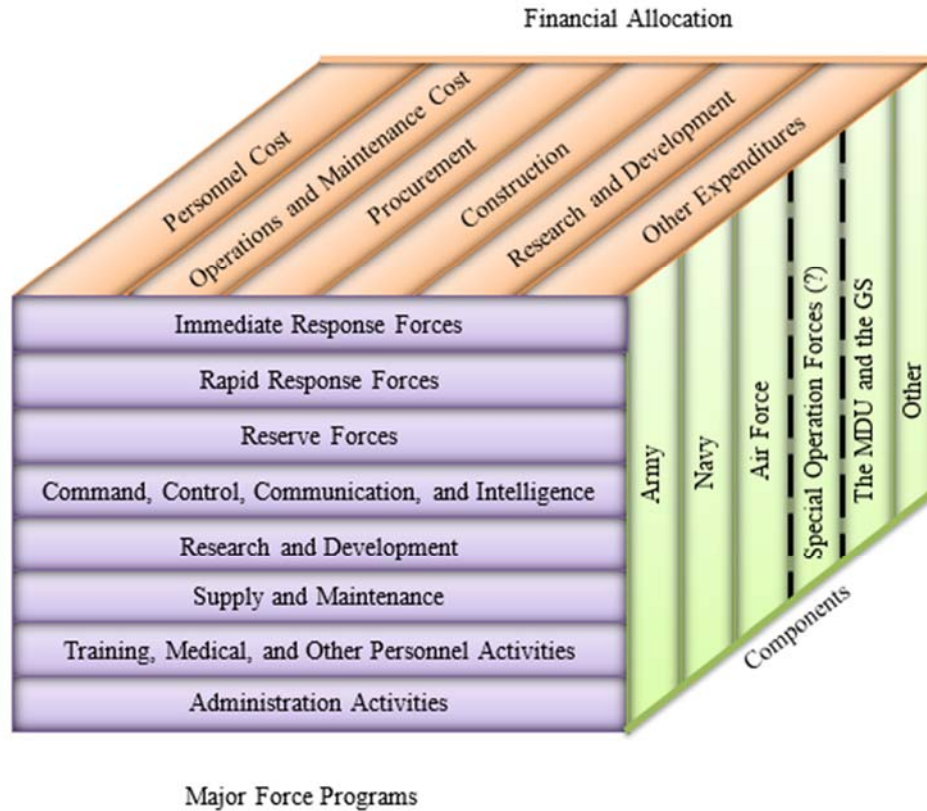


Figure 17. Annual Defense Program Structure

2. Project Integrity

For each separate project (for instance, the creation or purchase of a new sample of AME) the decision-making process must take integrity into account. Every project has to contain not only direct costs but also incidental costs such as personnel, training, infrastructure, utilization (use from the beginning to the disposal) etc. Figure 18 provides the scheme of the decision-making process for separate projects. For instance, creation of multifunctional complex P1 that is to be purchased in in the second year the project: not just investment costs should be considered, but also other associated costs. Of course, it is a resource that transformed into a cost, and not just for a general sum, but by year and allocation. Thus, project P1 in the first year needs allocated investment cost and infrastructure costs. In the second year, besides the first year costs, maintenance and personnel training costs are incurred. Assuming that the last purchase is in the second

year, the next couple of years cover maintenance and personnel training costs only. Finally, the estimated final utilization costs must not be eliminated. Thereby, the project will cover all areas that will affect not only the creation or procurement, but also its continuous support through the end of the life cycle.

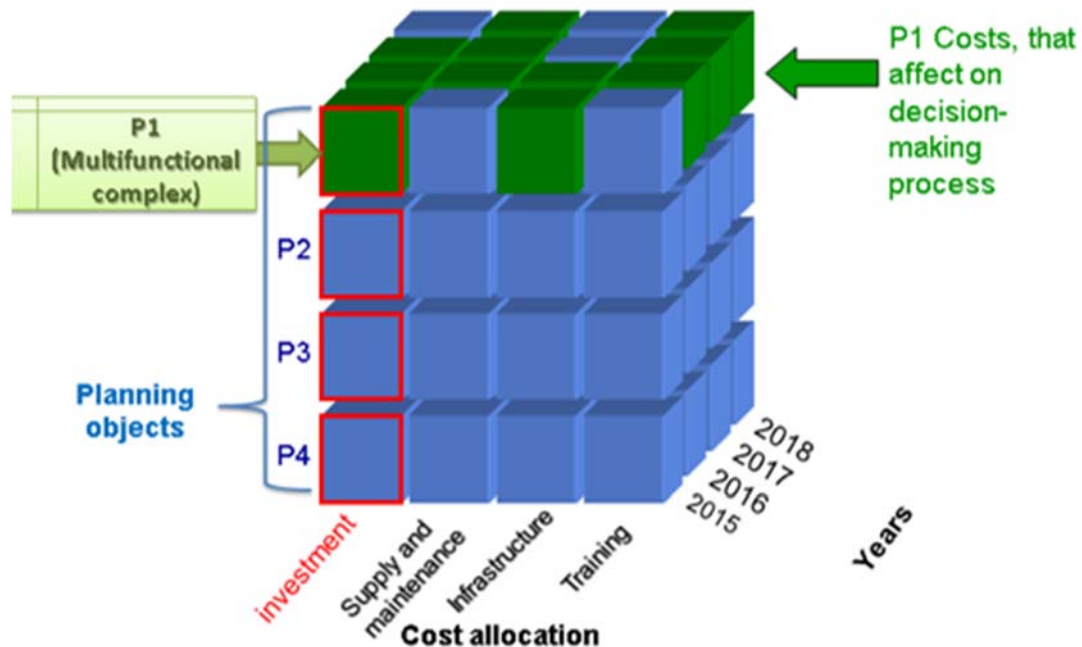


Figure 18. Transparent View of Project Cost Relevant for Making Decision

E. CONCLUSION

The main factors needed for the successful development of professional armed forces of Ukraine are as follows: the political will to eradicate corruption; the effective management of all sectors of defense and security; well-defined personal liability and responsibility at all levels; continuous analytical support of the development and implementation of programs and plans, timely adjustments and proper financial support. However, without managers' willingness to make necessary changes, any planned future activities and current gains will fail.

The MDU and the GS need be completely changed as institutions and with personnel as well. Legislation, strategic documents, plans, and projects should be simple,

clear, and transparent. Funding of the AFU should be transparent as well to avoid corruption, especially in procurement.

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VII. CONCLUSION

Intensified integration of Ukraine into the Euro-Atlantic, the military operations conducted in the South-East region of the state, and immediate defense reforms are among top state priorities. The planning stage of the development of the armed forces and the defense and security sector forms the basis for future reforms in other spheres of public administration and economic development of Ukraine. The creation of the modern AFU should go along with the development of defense planning system. The MDU and the GS should be able to recognize their mistakes and not repeat them in the future. It is time to turn away from the Eastern pattern and take the Western one.

Defense planning is a political and military process that States use to determine the necessary requirements of its defense obligations. But the system of defense planning must meet not only today's requirements of the state, but also be able to provide for the future. Unfortunately, over the years, the defense planning system failed to reach a common understanding on this issue; there are many contradictions and conflicts both in the political and economic components.

A. SUMMARY AND STRUCTURE OF WORK

The purposes of this research were to outline the outstanding aspects of the general problems of an existing defense planning system and define the basic ways to overcome them; to analyze conducting the DR and define its pitfalls; to describe necessary changes to the existing legislative framework of defense planning and corresponding changes in military institutions; to analyze defense programs and suggest restructuring for project creation; and to revive the IAS "Resource" and discuss its necessity for further development.

This work fulfilled these tasks by

1. Systematizing the factors that determine the aspects of problems of conducting defense planning and establishing changes in the MDU, the GS, and the AFU, and proposing defense legislation and institutional changes.

2. Analyzing the process of the DR in Ukraine, the weaknesses of Recommendations for the MDU about the organization and conduct of the DR, and defining the main pitfalls, based on the Western practice of the DR.
3. Analyzing the interdependence of budget and defense programs, making recommendations about restructuring defense program, and recommending an approach for project creation.
4. Projecting the evolution of the IAS “Resource” and defining recommendation for its further development.

The first chapter states the main purposes and importance of the work; defines tasks, objects, and subjects of research and the problems and methodology addressed here, and provides a literature review related to defense planning.

The second chapter provides evolution of all levels of defense planning: long, middle, and short. Also, it defines issues related to weakness of legislation in conducting defense planning and contains an analysis of establishment of structure of the MDU and the GS. Basis on this chapter, suggestions were made about necessary changes in legislation, personnel, and military structure.

The third chapter describes word practice approaching of the DR according to the British and the United States’ experiences. Also it showed analysis of the conducting of the Ukrainian DR and defines the range of problems which exists in recommendations about the organization and conduct of the defense review in the MDU. For efficiently conducting the DR, non-government institutions and foreign assistances should be involved as well as defense agencies.

The fourth chapter discusses the interdependence of budget and defense programs and analyzes the execution of resource planning. In addition, it describes the problem of planning activity by providing special fund financing. This chapter defines reasons for the suggestion about restructuring the defense program.

The evolution of the IAS “Resource,” the causes for its failure, and possibilities for it future development are contained in the fifth chapter. This chapter concludes that the IAS “Resource” is necessary not as software to support defense planning or decision-making process, but a tool for force management.

The sixth chapter contains recommendations about legislation changes, provides proposition related to changes in human resources and institutional structure, defines defense program restructuration, states a set of the major forces programs and project integrity. Finally, the conclusion contains main results, the structure of the study, and a recommendation for future research.

B. SUGGESTIONS FOR FUTURE RESEARCH

Defense planning became more effective given the following requirements: focus on the outputs, the evaluation of cost-effectiveness, planning transparency, etc. It is necessary to provide significant effort in purging the Soviet Union legacy, shifting from the Eastern pattern to the Western one.

Besides issues that rose in this work, the first suggestion for further research would be to edit the law *About the Organization of Defense Planning*, and provide defense planning in the other military organizations as well.

The next suggestion would be to study most deep world practice of conducting the DR and make suggestions for it in defense and security sphere of Ukraine, involving foreign experts.

Another suggestion is to fully analyze the set of IASs in the AFU. The IAS “Resource” should be further developed and should have a set of requirements for subsystems of the IAS “Resource,” that should be given by the Departments and Directorates of the MDU and the GS and commanders of units of the AFU.

Finally, the wide sector for future research is the development of indicators of program evaluation. Although the budget planning system has some indicators, defense planning has no reasonable indicators.

This study is not going to provide a methodology or model for defense planning. Any algorithm could address defense planning. However, the aim of this research is to increase the efficiency and quality of defense planning.

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APPENDIX A. FINANCIAL RESOURCES DURING 2006–2011

Sources	Expenditure, million hryvna					
	2006	2007	2008	2009	2010	2011
Decree of the CMU <i>About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2005–2007</i> ²³⁵	5,950.89	6,577.25				
Decree of the CMU <i>About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2006–2008 and long-term prospect</i> ²³⁶	7,451.2	8,789.8	10,466.4			
Decree of the CMU <i>About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2007–2009</i> ²³⁷		7,508.2	8,713.7	10,082.5		

²³⁵ Cabinet Ministry of Ukraine, Decree on September 9, 2003, № 1427, *About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2005–2007*. <http://zakon2.rada.gov.ua/laws/show/1427-2003-%D0%BF/page>.

²³⁶ Cabinet Ministry of Ukraine, Decree on September 14, 2004, № 1202, *About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2006–2008 and long-term prospect*. <http://zakon2.rada.gov.ua/laws/show/1202-2004-%D0%BF>.

²³⁷ Cabinet Ministry of Ukraine, Decree on September 14, 2005, № 913, *About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2007–2009*. <http://zakon2.rada.gov.ua/laws/show/913-2005-%D0%BF>.






Sources	Expenditure, million hryvna					
	2006	2007	2008	2009	2010	2011
Decree of the CMU <i>About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2008–2010</i> ²³⁸			10,468.9	12,429.1	14,571.4	
Decree of the CMU <i>About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2009–2011</i> ²³⁹	No data					
<i>The State Program of Development of the Armed Forces of Ukraine for 2006–2011</i>	8,748.4	10,283.4	11,835.6	13,044.8	14,140.3	15,368.6
Financed ²⁴⁰	6,445.5	8,162.2	9,472.8	8,356.0	10,538.7	12,706.0
Underfinanced of the State Program	2,302.9	2,121.2	2,362.8	4,688.8	3,601.6	2,662.6

²³⁸ Cabinet Ministry of Ukraine, Decree on September 25, 2006, № 1359, *About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2008–2010*. <http://zakon2.rada.gov.ua/laws/show/1359-2006-%D0%BF>.

²³⁹ Cabinet Ministry of Ukraine, Decree on October 10, 2007, № 1216, *About the Forecast of the Consolidated Budget of Ukraine by Main Types of Revenues, Expenditures and Financing for the Years 2009–2011*. <http://zakon2.rada.gov.ua/laws/show/1216-2007-%D0%BF>.

²⁴⁰ Analytical dates about executions of budget of Ministry of Defense of Ukraine for 2006 – 2011 <http://www.mil.gov.ua/diyalnist/byudzheta-vikonannya-czilovix-program/vikonannya-ministerstvom-oboroni-ukraini-derzhavnogo-byudzhetu/>.

APPENDIX B. PRESIDENTS OF UKRAINE VS. MINISTERS OF DEFENSE OF UKRAINE

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
President of Ukraine											
	Since 05/12/1991 Leonid Kravchuk			Until 19/07/1994	Since 19/07/1994			Leonid Kuchma			
Minister of Defense Of Ukraine	Konstantin Morozov		Ivan Bijan		Vitalii Radeckii		Valirii Shmarov		Olexandr Kuzmuk		
			04-08/10/1993		8/10/1993 – 25/08/1994						

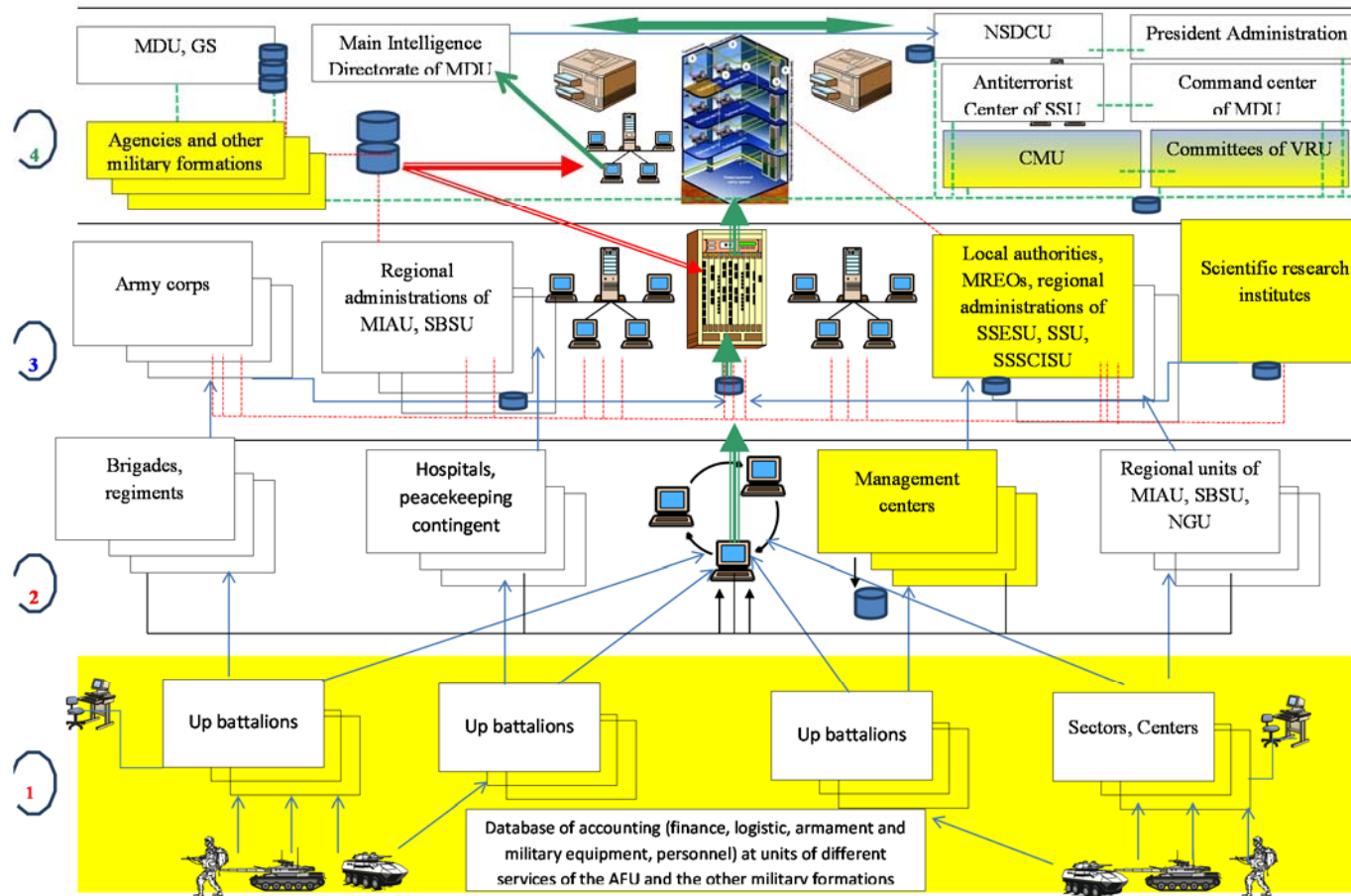
	2002	2003	2004	2005	2006	2007	2008	2009
President of Ukraine								
	Leonid Kravchuk Until 23/01/2005			Since 23/01/2005 Viktor Yushchenko			Until 25/02/2010	
Minister of Defense Of Ukraine	Volodymyr Shkidchenko		Yevgen Marchuk		Oleksandr Kuzmuk		Anatoliy Hrytsenko	
								
								

President of Ukraine	2010	2011	2012	2013	2014		
					Until 22/02 	23/02 – 07/06 	07/06 until now 
	Since 25/02/2010	Victor Yanukovich		Until 22/02/2014	Victor Yanukovich	Oleksandr Turchynov	Petro Poroshenko

Minister of Defense Of Ukraine	Valeriy Ivashchenko	Mykhailo Yezhel	Dmytro Salamatin	Pavlo Lebedyev	Until 22/02	27/02 – 25/03	25/03 – 03/07	03/07 – 14/10	14/10 until now
									
	05/06/2009 – 11/03/2010								

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APPENDIX C. THE PROPOSED SCHEME OF IAS “RESOURCE”



MDU	Ministry of Defense of Ukraine
CMU	Cabinet of Ministries of Ukraine
GS	General Staff of Armed Forces of Ukraine
MIAU	Ministry of Interior Affair of Ukraine
MREO	Military Registration and Enlistment Office
NGU	National Guard of Ukraine
SBSU	State Border Services of Ukraine
SSESU	State Service of Emergency Situation of Ukraine
SSSCISU	State Service of Special Communication and Information Security of Ukraine
NSDCU	National Security and Defense Council of Ukraine
SSU	Security Service of Ukraine
VRU	Verchovna Rada of Ukraine
Management centers	The centers of the operational groups that were established to respond or when the threat of aggression by the bodies of the SSU, the antiterrorist center of the SSU, the operational groups of the MDU, other working groups, anticrisis groups, databases centers in the regions, financial departments of regions and enterprises.
Agencies and other military formations	MIAU, SBSU, SSU, SSSCISU, SSESU, Ministry of Health Protection of Ukraine, Ministry of Economic Development and Trade of Ukraine, Ministry of Agricultural of Ukraine, Housing and Communal Services

↑ - input data

┆ - administration access

┆ - information exchange

■ - necessary to link up with IAS “Resource”

■ - necessary to link up with database of IAS “Resource”

1. Military units

2. Tactical level

3. Operational level

4. Strategic level

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